



**United Nations
Environment
Programme**

Distr.
GENERAL

UNEP/OzL.Pro/ExCom/76/51
14 April 2016

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Seventy-sixth Meeting
Montreal, 9-13 May 2016

PROJECT PROPOSAL: TUNISIA

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

Phase-out

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

France, UNEP and
UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Tunisia

| (I) PROJECT TITLE | AGENCY | MEETING APPROVED | CONTROL MEASURE |
|-------------------------------|----------------------------|------------------|-----------------|
| HCFC phase out plan (Stage I) | France, UNEP, UNIDO (lead) | 72 nd | 15% by 2018 |

| | | |
|--|------------|-------------------|
| (II) LATEST ARTICLE 7 DATA (Annex C Group I) | Year: 2014 | 34.5 (ODP tonnes) |
|--|------------|-------------------|

| (III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes) | | | | | | | Year: 2014 | | |
|---|---------|------|---------------|---------------|-----------|---------|---------------|---------|--------------------------|
| Chemical | Aerosol | Foam | Fire fighting | Refrigeration | | Solvent | Process agent | Lab use | Total sector consumption |
| | | | | Manufacturing | Servicing | | | | |
| HCFC-123 | | | | | | | | | |
| HCFC-124 | | | | | | | | | |
| HCFC-141b | | | | | | 0.9 | | | 0.9 |
| HCFC-142b | | | | | | | | | |
| HCFC-22 | | | | | 33.6 | | | | 33.6 |

| (IV) CONSUMPTION DATA (ODP tonnes) | | | |
|---|------|--|------|
| 2009 - 2010 baseline: | 40.7 | Starting point for sustained aggregate reductions: | 45.7 |
| CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes) | | | |
| Already approved: | 10.6 | Remaining: | 35.1 |

| (V) BUSINESS PLAN | | 2015 | 2016 | 2017 | Total |
|-------------------|----------------------------|---------|------|---------|---------|
| France | ODS phase-out (ODP tonnes) | 2.32 | | 0.4 | 2.72 |
| | Funding (US \$) | 444,354 | | 78,769 | 523,123 |
| UNEP | ODS phase-out (ODP tonnes) | 0.32 | | 0.1 | 0.42 |
| | Funding (US \$) | 62,350 | | 16,950 | 79,300 |
| UNIDO | ODS phase-out (ODP tonnes) | 2.82 | 0.0 | 0.6 | 3.42 |
| | Funding (US \$) | 512,419 | 0 | 116,003 | 628,422 |

| (VI) PROJECT DATA | | | 2014 | 2015 | 2016 | 2017 | 2018 | Total |
|---|---------------|---------------|---------|---------|----------|---------|-------|-----------|
| Montreal Protocol consumption limits | | | 40.7 | 36.63 | 36.63 | 36.63 | 36.63 | n/a |
| Maximum allowable consumption (ODP tonnes) | | | 40.7 | 36.63 | 36.63 | 36.63 | 34.60 | n/a |
| Agreed funding (US\$) | France | Project costs | 135,690 | 394,397 | 0 | 69,913 | 0 | 600,000 |
| | | Support costs | 17,187 | 49,957 | 0 | 8,856 | 0 | 76,000 |
| | UNEP | Project costs | 30,000 | 55,000 | 0 | 15,000 | 0 | 100,000 |
| | | Support costs | 3,900 | 7,150 | 0 | 1,950 | 0 | 13,000 |
| | UNIDO | Project costs | 512,885 | 478,896 | 0 | 108,414 | 0 | 1,100,195 |
| | | Support costs | 35,902 | 33,523 | 0 | 7,589 | 0 | 77,014 |
| Funds approved by ExCom (US\$) | Project costs | | 678,575 | 0 | 0.0 | 0 | 0 | 678,575 |
| | Support costs | | 56,989 | 0 | 0.0 | 0 | 0 | 56,989 |
| Total funds requested for approval at this meeting (US\$) | Project costs | | 0 | 0 | 928,293* | 0 | 0 | 928,293 |
| | Support costs | | 0 | 0 | 90,630* | 0 | 0 | 90,630 |

*Second tranche planned for 2015 but only submitted to the 76th meeting.

| | |
|--------------------------------------|------------------|
| Secretariat's recommendation: | Blanket approval |
|--------------------------------------|------------------|

PROJECT DESCRIPTION

1. On behalf of the Government of Tunisia, UNIDO as the lead implementing agency, has submitted to the 76th meeting a request for funding for the second tranche¹ of stage I of the HCFC phase-out management plan (HPMP), at a total cost of US \$1,018,923, consisting of US \$478,896, plus agency support costs of US \$33,523 for UNIDO, US \$55,000, plus agency support costs of US \$7,150 for UNEP, and US \$394,397, plus agency support costs of US \$49,957 for the Government of France. The submission includes a progress report on the implementation of the first tranche, the verification report on HCFC consumption, and the tranche implementation plan for 2016 to 2017.

Report on HCFC consumption

HCFC consumption

2. The Government of Tunisia reported a consumption of 34.5 ODP tonnes of HCFC in 2014 and estimated a consumption of 35.56 ODP tonnes for 2015, as shown in Table 1.

Table 1. HCFC consumption in Tunisia (2011-2014 Article 7 data, 2015 estimate)

| HCFC | 2011 | 2012 | 2013 | 2014 | 2015* | Baseline |
|----------------------|--------|--------|--------|--------|--------|----------|
| Metric tonnes | | | | | | |
| HCFC-22 | 599.53 | 577.25 | 566.85 | 610.43 | 629.75 | 709.34 |
| HCFC-141b | 8.46 | 8.46 | 8.46 | 8.46 | 8.46 | 14.57 |
| Total (mt) | 607.99 | 585.71 | 575.31 | 618.89 | 638.21 | 723.91 |
| ODP tonnes | | | | | | |
| HCFC-22 | 32.97 | 31.75 | 31.18 | 33.57 | 34.63 | 39.01 |
| HCFC-141b | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 1.61 |
| Total (ODP tonnes) | 33.9 | 32.68 | 32.11 | 34.5 | 35.56 | 40.62 |

*Estimate.

3. The 2015 estimated HCFC consumption is 12 per cent lower than the baseline, but slightly higher than that of 2014. The increase in consumption since 2011 was attributed to increased demand for HCFC-22 because of higher prices, resulting in registered enterprises importing up to the maximum of their quotas for stockpile. The lack of available kits using HCFC alternatives for the air-conditioning (AC) sector also contributed to this higher demand.

Verification report

4. 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 2014 was 34.4 ODP tonnes. The verification concluded that the licensing and quota system can control the quantities of legitimate HCFC imports. The report includes recommendations to further improve its operation, including controls on the import of equipment containing HCFC.

Country programme (CP) implementation report

5. The Government of Tunisia reported HCFC sector consumption data under the 2014 CP implementation report which is consistent with the data reported under Article 7.

¹ The second tranche was originally planned for 2015 but was only submitted to the 76th meeting.

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

Legal framework

6. The Government of Tunisia has implemented regulations to control the import/export and use of ODS, through a licensing and quota system that includes HCFCs. Actions are currently in place to prepare a new decree with stricter controls on the import and consumption of HCFCs and products containing HCFCs.

7. Provision of equipment to enhance HCFC identification capabilities of customs and enforcement officers was planned as part of the first tranche; however as the refrigerant identifiers remaining under the national CFC phase-out plan were delivered only in March 2015, this activity was postponed to be part of the next implementation period.

Manufacturing sector

Room AC sector

8. The four largest enterprises manufacturing residential air-conditioners using completely knocked down (CKD) kits were included in stage I of the HPMP for implementation in 2017-2020 using either HFC-32 or R-290 as the alternative. Technical assistance and training were provided to encourage the use of low-global warming potential (GWP) alternatives. These four enterprises will initiate conversions once CKD kits using alternatives are available commercially.

Solvent sector

9. Stage I of the HPMP included investment projects in two companies (i.e. Société de Fabrication des Articles Pharmaceutiques (SOFAP) and Société Nationale des Chemins de Fer Tunisiens (SNCFT)) which use bulk HCFC-141b as a solvent.

10. In the case of SNCFT, where HCFC-141b is used in the flushing of refrigeration circuits to service AC equipment in rail cars, equipment (i.e. 3 flushing kits for use with HFO-1233zd and 9 cylinders), stock of the alternative solvent, and training for 30 technicians on the use of this equipment were provided to the railway company. SNCFT will continue to use the same process of flushing except that the new solvent will be recaptured for re-use. As of March 2016, this project completed its planned activities.

11. For SOFAP, where HCFC-141b is used as a solvent for medical devices, activities undertaken focused on the identification and selection of the most appropriate and commercially available alternative solvents. Of the two alternatives tested i.e., HFE and HFO, HFE was selected and completed laboratory testing; pilot testing would commence in April 2016.

Refrigeration servicing sector

12. A training and certification programme has been designed; equipment and tools (i.e. gauge, manifold, pumps, scales) needed for the training centers and workshops have been identified, procured and delivered. Training of technicians is expected to start in mid-2016, as implementation during the first tranche focused on needs assessment and provision of tools.

Project implementation and monitoring unit (PMU)

13. The national ozone unit (NOU) continues to be responsible for the overall implementation of the HPMP, playing a key role in coordinating the National Commission for the Protection of the Ozone Layer made up of the HPMP Steering Group, the Legislative Group and the Technical Group.

Level of fund disbursement

14. As of March 2016, of the US \$678,575 so far approved (US \$512,885 for UNIDO, US \$30,000 for UNEP, and US \$135,690 for the Government of France) US \$155,635 (22.9 per cent) had been disbursed (US \$135,595 for UNIDO, US \$20,000 for UNEP and US \$40 for the Government of France). The balance of US \$522,940 will be disbursed in 2016 and 2017.

Implementation plan for the second tranche of the HPMP

15. The following activities will be implemented during the second tranche:
- (a) Policy and regulatory support by establishing a full e-licensing and quota system by the first half of 2017, and designing regulations for use of flammable refrigerants (UNEP) (US \$20,000);
 - (b) Support to increased capacity of customs officers through three meetings and four workshops to train 100 customs and enforcement officers (UNEP) (US \$35,000);
 - (c) Modification of the production lines and processes for the four AC enterprise; and training of staff (UNIDO) (US \$356,396) and (France) (US \$309,408)
 - (d) Two workshops on good refrigeration practices to train 120 technicians; distribution of 100 training manuals and provision of additional tools (i.e. gauge, manifold, pumps, scales) for service technicians (UNIDO) (US \$109,488);
 - (e) Incentives for an equipment replacement programme to encourage the use of new alternatives refrigerants, for selected end-users (France) (US \$38,000); and
 - (f) Project management (UNIDO) (US \$60,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION**COMMENTS**Verification report

16. The Secretariat noted that the verification report did not include the year 2015. UNIDO explained that in line with the Agreement between the Government and the Executive Committee, the current submission had been foreseen for the 75th meeting, but was deferred due to low disbursement, thus the verification was completed in September 2015 covering only 2014 consumption. Undertaking an additional verification for the same tranche request would be costly and may not be completed on time. However, the Government of Tunisia had provided estimated 2015 consumption (i.e. 35.6 ODP tonnes) that demonstrate the country's compliance with the Montreal Protocol and the Agreement.

CP report

17. The Secretariat, in noting that the 2014 CP report shows HCFC-22 for servicing only, advised UNIDO to request the Government to revise this data to make it consistent with the HPMP and include manufacturing. The 2015 CP report will be submitted by 1 May 2016, along with a revision of the 2014 CP report.

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

Legal framework

18. The Government of Tunisia has already issued HCFC import quotas control for 2016 in accordance with to Montreal Protocol control targets.

Manufacturing sector

Solvent sector

19. Delays in the implementation of activities in the solvent sector particularly for SOFAP were due to the additional time it took to identify alternatives that were commercially available. Consequently, an agreement has been reached with a supplier of the selected solvent (i.e. HFE) for the pilot and the final conversion phase to replace HCFC-141b. The project is expected to be completed by the end of 2016.

AC sector

20. The lack of available CKD kits that use low-GWP alternatives delayed the choice of the replacement for HCFC-22 in the refrigeration and air-conditioning manufacturing sector, UNIDO, during the first tranche, initiated discussions among producers on available technologies, their characteristics, how they will be used, and the implications of changing their operations, to facilitate implementation of the project once alternatives were identified. UNIDO has established contacts with tools and equipment manufacturers to explore cost reductions for some of the equipment items provided in this sector as contained in Appendix 8-A of the Agreement. Progress of this cooperation will be reported in the third tranche request.

Refrigeration servicing sector

21. In noting the Secretariat's concern over the lack of completed training for technicians, UNIDO reiterated that the Government opted to prioritize the design of a training programme and a national certification programme which were completed during the first tranche, in order to implement both programmes starting the fourth quarter of 2016. It is expected that around fifty technicians will be trained by the end of 2016.

Conclusion

22. The Secretariat noted that Tunisia continues to be in compliance with HCFC consumption targets in the Agreement with the Executive Committee, has an effective licensing and quota system, and continues to progress in the implementation of the activities approved under stage I. The implementation of the investment projects in the solvent and air-conditioning sector that experienced delays are currently under implementation with planned completion dates by end of 2016 and 2020, respectively. Training of customs and technicians will also commence under the second tranche. Fund disbursement exceeds the threshold for the release of the next tranche.

RECOMMENDATION

23. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the first tranche of stage I of the HCFC phase-out management plan of (HPMP) for Tunisia; and further recommends blanket approval of the second tranche of stage I of the HPMP for Tunisia, and the corresponding 2016-2017 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 (stage I, second tranche) | 478,896 | 33,523 | UNIDO |
| (b) | HCFC phase-out management plan (stage I, second tranche) | 55,000 | 7,150 | UNEP |
| (c) | HCFC phase-out management plan (stage I, second tranche) | 394,397 | 49,957 | France |
