|  |  |  |
| --- | --- | --- |
| **UNITED NATIONS** | | **EP** |
| UNEP | **United Nations**  **Environment**  **Programme** | Distr.  GENERAL  UNEP/OzL.Pro/ExCom/79/37  6 June 2017  ORIGINAL: ENGLISH |

EXECUTIVE COMMITTEE OF  
 THE MULTILATERAL FUND FOR THE  
 IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Seventy-ninth Meeting

Bangkok, 3-7 July 2017

**PROJECT PROPOSAL: NAMIBIA**

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

Phase-out

|  |  |
| --- | --- |
| • HCFC phase-out management plan (third tranche) | Germany |

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

**Namibia**

|  |  |  |  |
| --- | --- | --- | --- |
| **(I) PROJECT TITLE** | **AGENCY** | **MEETING APPROVED** | **CONTROL MEASURE** |
| HCFC phase out plan | Germany (lead) | 63rd | Total by 2025 |

|  |  |  |
| --- | --- | --- |
| **(II) LATEST ARTICLE 7 DATA (Annex C Group l)** | Year: 2016 | 3.76 (ODP tonnes) |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)** | | | | | | | | **Year: 2016** | |
| Chemical | Aerosol | Foam | Fire fighting | Refrigeration | | Solvent | Process agent | Lab use | Total sector consumption |
|  | | | | Manufacturing | Servicing |  | | | |
| HCFC-22 |  |  |  |  | 3.76 |  |  |  | 3.76 |

|  |  |  |  |
| --- | --- | --- | --- |
| **(IV) CONSUMPTION DATA (ODP tonnes)** | | | |
| 2009 – 2010 baseline: | 8.40 | Starting point for sustained aggregate reductions: | 8.40 |
| **CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)** | | | |
| Already approved: | 8.40 | Remaining: | 0 |

|  |  |  |  |
| --- | --- | --- | --- |
| **(V) BUSINESS PLAN** | | **2017** | **Total** |
| Germany | ODS phase-out (ODP tonnes) | 2.5 | 2.5 |
| Funding (US $) | 302,700 | 302,700 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **(VI) PROJECT DATA** | | | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020-2024** | **2025** | **Total** |
| Montreal Protocol consumption limits | | | n/a | n/a | 8.40 | 8.40 | 7.56 | 7.56 | 7.56 | 7.56 | 7.56 | 5.46 | 2.73 | n/a |
| Maximum allowable consumption (ODP tonnes) | | | 8.87 | 8.4 | 7.22 | 6.64 | 5.88 | 4.24 | 2.97 | 1.68 | 0.77 | 0.77 | 0.21 | n/a |
| Agreed funding (US$) | Germany | Project costs | 300,000 | 0 | 240,000 | 0 | 0 | 0 | 270,000 | 0.0 | 0.0 | 0.0 | 90,000 | 900,000 |
| Support costs | 36,333 | 0 | 29,067 | 0 | 0 | 0 | 32,700 | 0.0 | 0.0 | 0.0 | 10,900 | 109,000 |
| Funds approved by ExCom (US$) | | Project costs | 300,000 | 0 | 240,000 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 540,000 |
| Support costs | 36,333 | 0 | 29,067 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 65,400 |
| Total funds requested for approval at this meeting (US$) | | Project costs | 0 | 0 | 0 | 0 | 0 | 0 | **270,000** | 0 | 0 | 0 | 0 | 270,000 |
| Support costs | 0 | 0 | 0 | 0 | 0 | 0 | **32,700** | 0 | 0 | 0 | 0 | 32,700 |

|  |  |
| --- | --- |
| **Secretariat’s recommendation:** | For blanket approval |

**PROJECT DESCRIPTION**

# On behalf of the Government of Namibia, the Government of Germany, as the designated implementing agency, has submitted to the 79th meeting a request for funding for the third tranche of the HCFC phase-out management plan (HPMP), at the amount of US $270,000, plus agency support costs of US $32,700[[1]](#footnote-1). The submission includes a progress report on the implementation of the second tranche, the verification report on HCFC consumption and the tranche implementation plan for the period from 2017 to 2025.

Report on HCFC consumption

*HCFC consumption*

# The Government of Namibia reported a consumption of 3.76 ODP tonnes of HCFC in 2016. The 2012-2016 HCFC consumption is shown in Table 1.

**Table 1. HCFC consumption in Namibia (2012-2016 Article 7 data)**

| **HCFC** | **2012** | **2013** | **2014** | **2015** | **2016** | **Baseline** |
| --- | --- | --- | --- | --- | --- | --- |
| **Metric tonnes** |  |  |  |  |  |  |
| HCFC-22 | 86.53 | 126.00 | 64.60 | 96.40 | 68.38 | 147.4 |
| HCFC-141b | 0.00 | 0.80 | 0.75 | 0.55 | 0.00 | 2.4 |
| **Total (mt)** | **86.53** | **126.80** | **65.35** | **96.95** | **68.38** | **149.8** |
| **ODP tonnes** |  |  |  |  |  |  |
| HCFC-22 | 4.76 | 6.93 | 3.55 | 5.30 | 3.76 | 8.1 |
| HCFC-141b | 0.00 | 0.09 | 0.09 | 0.06 | 0.00 | 0.3 |
| **Total (ODP tonnes)** | **4.76** | **7.02** | **3.64** | **5.36** | **3.76** | **8.4** |

# In 2016, the HCFC consumption was 55 per cent below the baseline for compliance and 11 per cent below the maximum allowable consumption in the Agreement with the Executive Committee for 2016.

# The low consumption in 2014 was due to the stockpile in 2013 when excessive amounts were imported; therefore importers imported less in this year. The 2015 consumption was more comparable to the level of consumption in the country. In 2016 the low consumption was attributed to the low quota issued for the year (76 mt quota was issued, out of this, 10 mt was reserved for emergency and 7 mt emergency quota was not used) and the ban on HCFC‑based equipment which had been enforced since 2013; in addition, the fisheries sector is steadily changing to non‑HCFC-22 equipment. Currently the local price of HCFC-22 is considerably high (US $13.38/kg), as only a few registered importers bring in HCFC-22. This further reduced the demand for HCFC-22. The ODS alternative survey also indicates there is an increasing import of alternatives including R-717, HFC-404A and HFC-410A.

*Verification report*

# 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 2016 was 3.76 ODP tonnes. The verification concluded that Namibia has been in compliance with the Montreal Protocol control targets, and that the HCFC consumption in 2015 and 2016 was below the maximum allowable consumption limits set in the Agreement between the Government and the Executive Committee. The recommendations by the verification expert, including that quotas should be issued before the end of November to enable early planning of imports; further strengthening the regular training of customs officers particularly for new staff; and that information on import permit should be incorporated into the customs database to enable better import monitoring, have been taken into consideration for the implementation of the third tranche.

# *Country programme (CP) implementation report*

# The Government of Namibia reported HCFC sector consumption data under the 2016 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

# Progress report on the implementation of the second tranche of the HPMP

*Legal framework*

# The Government of Namibia has established a licensing and quota system for the import/export of HCFCs, which is being effectively enforced. The Government has also implemented bans on imports of new HCFC-based equipment and imports of HCFC-141b in bulk, as of 1 January 2013.

*Refrigeration servicing sector*

# The following activities were implemented:

## A total of 256 customs officers were trained in the identification of refrigerants and the control of imports of ODS and ODS-based equipment. Five refrigerant identifiers were provided to border posts;

## One trainer was trained abroad in the safe use of natural refrigerants. Seven training workshops were organized and a total of 156 technicians were trained in good servicing practices, focusing on the safe use of hydrocarbon (HC) refrigerants (mainly R-290 and R‑600a), the minimum standard to be followed when servicing equipment with alternatives, and the selection of refrigerants for specific equipment;

## Two sets of refrigerant charging units and two sets of recovery units for handling HC refrigerants were provided to vocational training centres to conduct training on the safe handling of HC refrigerants;

## Assistance was provided to the National Training Authority (NTA) to incorporate the international guidelines and competency requirements for servicing refrigeration and air‑conditioning (RAC) equipment into the curriculum of the RAC course to ensure suitably qualified technicians working in the country; and

## Public awareness-raising activities were conducted to promote HCFC phase-out.

*Project implementation and monitoring unit (PMU)*

# Project monitoring and coordination was conducted by the National Ozone Unit.

Level of fund disbursement

# As of May 2017, of the US $540,000 approved so far, US $406,844 had been disbursed as shown in Table 2. US $57,600 had been committed by the Government of Germany; the balance of US $133,156 will be disbursed during the implementation of the third tranche (2017-2025).

**Table 2. Financial report of stage I of the HPMP for Namibia (US $)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Agency** | **First tranche** | | **Second tranche** | | **Total approved** | |
| **Approved** | **Disbursed** | **Approved** | **Disbursed** | **Approved** | **Disbursed** |
| Government of Germany | 300,000 | 300,000 | 240,000 | 106,844 | 540,000 | 406,844 |
| **Disbursement rate (%)** | **100** | | **44.52** | | **75.34** | |

Implementation plan for the third tranche of the HPMP

# The third funding tranche of the HPMP will be implemented between July 2017 and July 2025. During this period, the Government of Namibia will undertake the following activities:

## Continue to provide training to customs officers in ODS import control for new entrants into the customs service; conduct 12 additional training courses for 120 customs officers on ODS import control and prevention of illegal trade at the main borders (i.e., Walvis way at the coast and the southern border with South Africa) and train two additional trainers in Kenya to meet the needs in identification of ODS; incorporate information on import permit issued into the customs database; and provide two refrigerant identifiers and spare parts (US $24,000);

## Train six additional trainers in South Africa in servicing equipment using alternative technologies including CO2 and ammonia refrigerants to upgrade the know-how and skills of the trainers at the Vocational Training Centres (VTC); conduct 18 additional training courses for 180 technicians in servicing equipment using alternative refrigerants including HCs; and purchase new RAC units that were originally designed for using HCs from South Africa for VTCs to enable them to conduct hands-on training in servicing, and conduct training on the safe handling of HC refrigerants in servicing new RAC units that were originally designed for using HCs(US $118,000);

## Implement an incentive programme to establish the supply chain for new air-conditioning (AC) units based on HC-290 and HFC-32. A subsidy could be provided to suppliers to encourage them to bring in AC units (up to 150 units) to increase market penetration; and convert the commercial refrigeration equipment in one supermarket to CO2 (US $73,000);

## Awareness-raising programme for HCFC phase-out, advertising control measures, promotion of low‑GWP alternatives, coordination meeting and stakeholder workshop (US $19,000); and

## Monitoring, coordination and reporting on the activities under the HPMP (US $36,000).

**SECRETARIAT’S COMMENTS AND RECOMMENDATION**

**COMMENTS**

Legal framework

# The Government of Namibia has established an enforceable licensing and quota system. In order to achieve the accelerated phase-out targets, the Government has been issuing HCFC import quotas at much lower levels than the Montreal Protocol phase-out schedule. The quota for 2017 has been issued at 54 mt including 10 mt for emergency use reserved by the NOU.

Reporting on HCFC-22 used for servicing foreign-owned ships

# The Government of Germany confirmed that the HCFC consumption reported under Article 7 data included all ODS consumed in the country including the amount used for servicing foreign-owned ships, in line with decision 71/40(a)(v).

# Refrigeration servicing sector

# Noting that HC technology is the main alternative technology that has been promoted in the HPMP and taking into account decision 71/40(b) on the revised implementation plan to focus the incentive programme only on replacement of HCFC-based equipment and not on retrofits, the Secretariat inquired about whether retrofitting equipment to HC refrigerant has been practiced and how the safety‑related factors have been taken into consideration. The Government of Germany informed the Secretariat that some retrofitting was conducted before the 72ndmeeting. After the Executive Committee provided guidance on the introduction of HC refrigerants through decisions 72/17, 72/41 and 73/34, the Governments of Namibia and Germany decided that the conversion of non-HC-designated equipment would not be promoted. The activities in the HPMP has since then been focusing on upgrading the curriculum of certification courses and conducting training on the safe use of HC-based equipment following Germany’s safety guidelines. The Namibia Refrigeration Association has started the process of drafting a safety code for the use of alternative refrigerants including HCs (in new equipment), ammonia and CO2. Currently the HC-based units installed in the country include domestic refrigerators (15 per cent), freezer units (5 per cent) and beverage coolers (1 per cent). Fifty to 60 per cent of the refrigerators imported into the country are HC-based units, as manufacturers from South Africa (Brand KIC or DEFY) are supplying HC-based units. The Government is in discussion with a manufacturer in China (Media) to import HC‑290-based air-conditioning systems.

Conclusion

# The Secretariat notes that an import licensing and quota system is fully operational and that the HCFC consumption in 2016 was 55 below the HCFC baseline for compliance. The activities in the servicing sector have been implemented and have progressed as planned. Guidelines and codes of practice are being developed to include safety standards for using refrigeration and air-conditioning systems operating with alternative refrigerants including HCs, ammonia and CO2. Issues related to HCFC import control and prevention of illegal imports have been integrated into the curricula of vocational institutions and the training curricula for customs officers. The Refrigeration Association will be further strengthened with the aim of empowering it to conduct training and certification of technicians, coordination, inspection and monitoring of Montreal Protocol activities beyond HPMP implementation. Introduction of HC refrigerants are implemented through replacement not retrofitting the HCFC‑22-based units. The activities planned in the third tranche focusing on HCFC import control, capacity enhancement of the servicing sector and establishment of the supply chain for importing new RAC units using alternative refrigerants will enable the country to achieve compliance with their accelerated phase-out targets.

# **RECOMMENDATION**

# The Fund Secretariat recommends that the Executive Committee take note of the progress report on the implementation of the third tranche of stage I of the HCFC phase-out management plan of (HPMP) for Namibia; and further recommends blanket approval of the third tranche of stage I of the HPMP for Namibia, and the corresponding 2017-2025 tranche implementation plan, at the funding level shown in the table below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Project title** | **Project funding (US $)** | **Support cost (US $)** | **Implementing agency** |
| (a) | HCFC phase-out management plan (stage I, third tranche) | 270,000 | 32,700 | Germany |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

1. As per the letter of 8 May 2017 from the Ministry of Industrialisation, Trade and SME Development of Namibia to the Secretariat. [↑](#footnote-ref-1)