EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Fifty-third Meeting
Montreal, 26-30 November 2007

PROJECT PROPOSAL: TOGO

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

Phase-out

- Terminal phase-out management plan: first tranche
  
  UNEP and UNDP
**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS**  
**TOGO**

**PROJECT TITLE**  
Terminal phase-out management plan: first tranche

**BILATERAL/IMPLEMENTING AGENCY**  
UNEP and UNDP

### SUB-PROJECT TITLES

<table>
<thead>
<tr>
<th>(a)</th>
<th>Strengthening of technical capacities for refrigeration technicians</th>
<th>UNEP/UNDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b)</td>
<td>Capacity building for customs officers</td>
<td>UNEP</td>
</tr>
<tr>
<td>(c)</td>
<td>Technical assistance and equipment programme; and</td>
<td>UNDP</td>
</tr>
<tr>
<td>(d)</td>
<td>Project implementation and monitoring</td>
<td>UNEP</td>
</tr>
</tbody>
</table>

**NATIONAL COORDINATING AGENCY:**  
DIRECTION DE L’ENVIRONNEMENT, MINISTÈRE DE L’ENVIRONNEMENT ET DES RESSOURCES FORESTIERES

### LATEST REPORTED CONSUMPTION DATA FOR ODS Addressed in Project

#### A: ARTICLE-7 DATA (ODP TONNES 2006, AS OF SEPTEMBER 2007)

<table>
<thead>
<tr>
<th>Product</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFC</td>
<td>19.9</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>0</td>
<td>36.7</td>
</tr>
</tbody>
</table>

**CURRENT YEAR BUSINESS PLAN:**  
Total funding US $97,719: total phase-out 1 ODP tonnes.

### PROJECT DATA

<table>
<thead>
<tr>
<th>Annex</th>
<th>CFC (ODT TONNES)</th>
<th>Montreal Protocol limit</th>
<th>Annual consumption limit</th>
<th>Annual phase-out from ongoing projects</th>
<th>Annual phase-out newly addressed</th>
<th>Annual unfunded phase-out</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10.1</td>
<td>19.9</td>
<td>5.9</td>
<td>n/a</td>
<td>5.9</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.9</td>
<td>5.9</td>
<td></td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.9</td>
<td>5.9</td>
<td></td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.9</td>
<td>5.9</td>
<td></td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.9</td>
<td>5.9</td>
<td></td>
<td>5.9</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL ODS CONSUMPTION TO BE PHASED OUT**

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final project costs (US $):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funding for Lead IA: UNEP</td>
<td>90,000</td>
<td>70,000</td>
<td></td>
<td></td>
<td>160,000</td>
<td></td>
</tr>
<tr>
<td>Funding for Cooperating IA: UNDP</td>
<td>111,000</td>
<td>74,000</td>
<td></td>
<td></td>
<td>185,000</td>
<td></td>
</tr>
<tr>
<td>Total project funding</td>
<td>201,000</td>
<td>144,000</td>
<td></td>
<td></td>
<td>345,000</td>
<td></td>
</tr>
<tr>
<td>Final support costs (US $):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support cost for Lead IA: UNEP</td>
<td>11,700</td>
<td>9,100</td>
<td></td>
<td></td>
<td>20,800</td>
<td></td>
</tr>
<tr>
<td>Support cost for Cooperating IA: UNDP</td>
<td>9,990</td>
<td>6,660</td>
<td></td>
<td></td>
<td>16,650</td>
<td></td>
</tr>
<tr>
<td>Total support costs</td>
<td>21,690</td>
<td>15,760</td>
<td></td>
<td></td>
<td>37,450</td>
<td></td>
</tr>
<tr>
<td>TOTAL COST TO MULTILATERAL FUND (US $)</td>
<td>222,690</td>
<td>159,760</td>
<td></td>
<td></td>
<td>382,450</td>
<td></td>
</tr>
</tbody>
</table>

**Final project cost effectiveness (US $/kg)**

**FUNDING REQUEST:**  
Pending.

**SECRETARIAT’S RECOMMENDATION[S]**  
Pending
PROJECT DESCRIPTION

1. On behalf of the Government of Togo, UNEP, as the lead implementing agency, has submitted a terminal CFC phase-out management plan (TPMP) for consideration by the Executive Committee at its 53rd Meeting. The project will also be implemented with assistance from UNDP. The total cost of the TPMP as submitted is US $345,000 (US $165,000 plus agency support costs of US $21,450 for UNEP and US $180,000 plus agency support cost of US $16,200 for UNDP). The project proposes the complete phase out of CFCs by the end of 2009. The CFC baseline for compliance is 39.8 ODP tonnes.

Background

2. In regard to the phase-out of CFCs in the refrigeration servicing sector, at its 38th Meeting the Executive Committee allocated US $382,500 to UNDP and UNEP for the development of ODS regulations, implementation of training programmes for refrigeration service technicians and customs officers, establishment of a recovery and recycling programme, and a programme for monitoring the activities included in the RMP. The implementation of the RMP in Togo resulted in the training of 347 refrigeration service technicians in good servicing practices including 71 trainers, 46 technicians in recovery and recycling operations and 281 customs officers. It also led to equipping 20 workshops with basic tools, as well as four recovery centres with recovery and recycling equipment. As a result, in 2006, the country was able to recover at least half a tonne each of CFC-12 and HCFC-22. The project also facilitated the distribution of four kits of refrigerant identifiers.

Policy and legislation

3. Togo follows the sub-regional regulations of the Western African Economic and Monetary Union, and its ODS regulations are governed by the UEMOA decree promulgated in July 2005. Nationally, it has initiated several measures to control the import and export of ODS. There are inter-ministerial decrees that regulate the elimination of ODS substances, including import and re-export of substances and a ban on the import and export of methyl bromide.

Refrigeration servicing sector

4. Togo reported a consumption of 9.9 ODP tonnes of CFCs in 2006. Out of this figure, 6.9 ODP tonnes are used for servicing domestic refrigerators, 2.3 ODP tonnes for commercial and industrial refrigeration systems, and 0.7 ODP tonnes for MAC units.

5. The TPMP suggests that as of 2007, the number of refrigeration technicians in Togo has risen to 1,200 from 900 when the RMP was approved in 2002. These technicians are divided between about 500 repair workshops, mostly in the informal sector. Around 50 percent (450 technicians and trainers) of these have received formal training under the RMP.

6. The current prices of refrigerants per kg are: US $8.70 for CFC-12, US $23.90 for CFC-11, US $20.62 for HFC-134a, US $5.07 for HCFC-22. R-502 is also available in Togo at US$19.03 per kilogramme as well as R-600a and R-400a which cost US$30.15 per kilogramme.
Activities proposed in the TPMP

7. The following activities are proposed to be implemented through the TPMP project:
   (a) Strengthening of technical capacities for refrigeration technicians;
   (b) Capacity building for customs officers;
   (c) Technical assistance and equipment programme; and
   (d) Project implementation and monitoring.

8. The Government of Togo plans the complete phase-out of CFCs by 1 January 2010. A detailed work plan for 2008 has been submitted with the TPMP proposal.

SECRETARIAT’S COMMENTS AND RECOMMENDATION

COMMENTS

9. The 2006 CFC consumption reported by the Government of Togo under Article 7 of the Protocol of 10.1 ODP tonnes is still higher than the consumption level allowed under the Montreal Protocol for 2007. Based on the data available, Togo has demonstrated a steadily declining consumption of CFCs from 2002 (35.3 ODP tonnes) to 2006 (10.1 ODP tonnes). While its 2006 consumption is still over the consumption limit for 2007, the reduction between 2005 and 2006 is around seventy percent.

10. The Secretariat discussed with the implementing agency the technical issues related to the current levels of CFC consumption in Togo, the level of implementation of the RMP particularly as it relates to similar activities proposed in the TPMP, and the current status of the disbursement of activities included in the approved RMP. It also discussed issues related to the technical viability of an incentive programme especially for the domestic refrigeration sector, and the overall sustainability of activities within the TPMP in order to ensure that the country achieves its zero phase-out of CFCs by 2010.

Level of funding and implementation modalities

11. During the review of the TPMP, the Secretariat noted that:
   (a) Most of the CFC use in the refrigeration sector in the country, as indicated in paragraph 5 above, is in the domestic air conditioning sector. However, in looking at the overall use of the different refrigerants in the servicing sector, CFC use is only 11 percent of a total of 86.92 metric tonnes of refrigerant use which includes HFC-134a, HCFC-22, R-502, R-600a and R-404a. CFC use in domestic refrigeration servicing is only 11 percent, while the rest is attributed to HFC-134a.
   (b) The recovery and recycling programme under the RMP recovered small quantities of CFC-12 and HCFC-22, at a rate of 500 kilogrammes annually. These are
immediately reused the serviced equipment. It was observed that the recovery and recycling scheme failed to work well perhaps due to a lack of an incentive for the scheme to work;

(c) The training of technicians has resulted in good practices being followed by those trained, but the need for further training in new technology and alternatives such as hydrocarbons was expressed due to the recent influx of hydrocarbon compressors in the market;

(d) The price of CFCs is increasing while HFC-134a despite it being still more expensive than CFCs is showing a downward trend in the last three years. It was also noted that hydrocarbon refrigerants in the form of R-600a has entered the market in 2007 albeit at a very high price as compared to other refrigerants;

(e) Despite the presence of HC compressors in the market, hydrocarbon refrigerants are still very expensive in the country;

(f) The TPMP envisages the production of local recovery equipment, however the results of the recovery and recycling programme under the RMP have not been encouraging; and

(g) While the projects proposed in the TPMP are envisaged to draw upon the lessons in the RMP, it appears to still be considered on a project by project basis and does not provide an overall strategy of how compliance will be met and sustained through the interaction of the various components of the TPMP.

12. UNEP provided clarification on the status of the incentive programme, and explained that the programme has already identified six recipients for the subsidy, which is expected to phase out 5 ODP tonnes. However, the project is still ongoing and has not shown any results as of the writing of this document.

13. The Secretariat sought clarification on the equipment component described in the TPMP particularly the need for hydrocarbon (HC) demonstration equipment which is being requested at a high cost especially considering that the price of HC refrigerant in the market is very high. It also requested more information on the nature of the local recovery equipment to be produced and how this would contribute to phase out seeing that the recovery and recycling component of the RMP was not very successful. UNEP explained that the HC equipment is needed to enable the technicians to service refrigerators with HC compressors. While it is recognised that the price of HC refrigerants is quite high, the fact that it is currently available in the market and the possibility of HC training may encourage the use of HC refrigerants and increase demand. UNEP was also asked to provide details on the type of equipment to be manufactured, and how this would contribute to compliance.

14. On this basis, the Secretariat concluded that most of the activities that are being proposed in the TPMP for Togo have already been fully implemented and, in light of decision 45/54(c) (i.e., future TPMP proposals might include requests for funding up to US $345,000 for countries with a CFC baseline between 30-60 ODP tonnes (such as Togo) on the understanding that individual proposals would still need to demonstrate that the funding level was necessary to
achieve complete phase-out of CFCs), a funding request at the amount of US $345,000 could not be justified.

15. The Secretariat is still discussing with UNEP some unresolved technical issues, and will advise the Executive Committee accordingly on the outcome of this discussion before the 53rd Meeting.

RECOMMENDATION

16. Pending.