PROJECT PROPOSAL: PAPUA NEW GUINEA

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

Refrigeration

- Terminal phase-out management plan for ODS (second tranche)  Germany
PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS
PAPUA NEW GUINEA

PROJECT TITLE BILATERAL/IMPLEMENTING AGENCY
Terminal ODS phase-out management plan (second tranche) Germany

NATIONAL CO-ORDINATING AGENCY: National Ozone Unit

LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT
A: ARTICLE-7 DATA (ODP tonnes, 2004, as of 17 January 2006)

<table>
<thead>
<tr>
<th>ODS</th>
<th>Foam</th>
<th>Ref.</th>
<th>Aerosol</th>
<th>ODS</th>
<th>Solvents</th>
<th>Process agent</th>
<th>Fumigant</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFC-11</td>
<td></td>
<td>16.55</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CFC-115</td>
<td></td>
<td>0.47</td>
<td></td>
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</tbody>
</table>

CFC consumption remaining eligible for funding (ODP tonnes) n/a

B: COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes, 2004, as of December 2005)

<table>
<thead>
<tr>
<th>ODS</th>
<th>Foam</th>
<th>Ref.</th>
<th>Aerosol</th>
<th>ODS</th>
<th>Solvents</th>
<th>Process agent</th>
<th>Fumigant</th>
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</thead>
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<tr>
<td>CFC-11</td>
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<td>17.17</td>
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</table>

CURRENT YEAR BUSINESS PLAN: Total funding 249,000: total phase-out 9.0 ODP tonnes (in 2006)

<table>
<thead>
<tr>
<th>PROJECT DATA</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>Total</th>
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<tbody>
<tr>
<td>Montreal Protocol limits</td>
<td>18.15</td>
<td>5.40</td>
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<td>23.55</td>
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<tr>
<td>Annual consumption limit</td>
<td>17.00</td>
<td>8.00</td>
<td>4.50</td>
<td>0.00</td>
<td>30.50</td>
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<td>Annual phase-out from ongoing projects</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Annual phase-out newly addressed</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual unfunded phase-out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.00</td>
</tr>
<tr>
<td>Total ODS consumption to be phased out</td>
<td>9.00</td>
<td>3.50</td>
<td>4.50</td>
<td>17.00</td>
<td></td>
</tr>
</tbody>
</table>

Project cost as originally submitted (US $)

| Total project costs (US $): | 480,000 | 220,000 | 700,000 |
| Total Support costs (US $)  | 59,700   | 27,300  | 87,000  |
| Total cost to the Multilateral Fund (US $) | 539,700 | 247,300 | 787,000 |

Final project cost effectiveness (US $/kg) 15.58

FUNDING REQUEST: Approval of funding for the second tranche (2006) as indicated above.

SECRETARIAT’S RECOMMENDATION Individual consideration
PROJECT DESCRIPTION

1. On behalf of the Government of Papua New Guinea, the Government of Germany has submitted, for consideration by the Executive Committee at its 48th Meeting, a request for the second and last tranche of funding for the implementation of the Terminal ODS Phase-out Management Plan (TPMP) in the amount of US $220,000 plus agency support costs of US $27,300 for Germany. The Government of Papua New Guinea has also submitted a progress report on the implementation of the first work programme.

Background

2. The Papua New Guinea TPMP was approved by the Executive Committee at its 39th Meeting, to completely phase out its CFC consumption by 2008. Total funding of US $700,000 was approved in principle by the Executive Committee, and US $480,000 was approved for Germany for the implementation of the first work programme. This was the first time funding had been approved to phase out ODS in Papua New Guinea.

3. At their 15th Meeting the Parties noted that, for the July 2000-June 2001 control period, Papua New Guinea was in non-compliance with its obligations under Article 2A of the Montreal Protocol (i.e., CFC consumption was above its CFC baseline of 36.3 ODP tonnes). The Parties also noted Papua New Guinea’s submission of its plan of action to ensure a prompt return to compliance (decision XV/40).

Progress report on the implementation of the first work programme

4. A permit system to monitor and control the import and export of ODS has been in force since January 2004. Additionally, since November 2005, the Department of Environment and Conservation has approved the imposition of charges of US $7.90/kg of CFC and US $4.75/kg of CFC blends imported into the country in order to raise the price of CFC-based refrigerants and encourage the changeover to non-CFC alternatives. Current prices of refrigerants are as follows: US $6.60/kg of CFC-12; US $13.92/kg of R502; US $3.92/kg of HCFC-22; and US $12.00/kg of HFC-134a.

5. ODS regulations have also been drafted by the Attorney General’s office. However, they have not yet been approved and enforced. These regulations include: a mandatory requirement that all refrigeration technicians be licensed with the Ozone Unit; a ban on imports of ODS-based equipment; labelling of all ODS; controls on the use of HCFC; and penalties for contravening the provisions of the regulations. It is expected that the regulations will be approved within the first quarter of 2006.

6. The train-the-trainers programme for customs officers was held in March 2004, and 19 officers were trained. Since then, 93 customs officers have been trained and seven ODS identifiers have been distributed to the country’s main border ports.

7. In total, 108 refrigeration servicing technicians have been trained. The Ozone Unit has also discussed with the Department of Education the inclusion of best refrigeration practices in curriculum courses. Some trainers have already adopted the new curriculum, through which some 200 students have been trained.
8. The equipment for the recovery and recycling network (15 recovery units and three recycling units) has been purchased and a refrigeration company has been selected to manage the network. So far, two recovery units and one recycling unit have been given to the company to start recovery/recycling operations and to achieve a better understanding of the management of the network.

9. In addition, a workshop with representatives from refrigeration servicing companies and owners of commercial refrigeration systems was held to develop guidelines for replacing CFC-based equipment with alternative refrigerants as proposed in the TPMP. However, this programme has not yet commenced.

10. The monitoring and follow up of phase-out activities has been conducted by a national consultant and a volunteer from Germany’s development service, in coordination with the Ozone Officer. Awareness-raising material has been developed to promote the training courses and incentive scheme, and to publicize ozone-related issues.

**Plan of action for the second work programme**

11. The Government of Papua New Guinea is requesting US $220,000 plus agency support costs for the Government of Germany for the implementation of the second work programme of the TPMP, to achieve phase-out of an additional 17 ODP tonnes of CFCs. The activities proposed include:

   (a) Approval of the ODS regulations and implementation of miscellaneous charges;

   (b) Technical assistance for refrigeration servicing technicians, including additional training programmes; developing a database with all licensed technicians; determine whether there are basic tool requirements which can be supplied to refrigeration servicing companies with licensed technicians; and developing a code of good practice;

   (c) Training programme and incentive package for customs officers;

   (d) Implementation of the recovery and recycling programme and the incentive for the conversion of CFC-based refrigeration systems to non-ODS alternative refrigerants;

   (e) Technical assistance to owners of halon-based systems to replace them with alternative technologies;

   (f) Detailed assessment by the Ozone Unit and pest control authorities on the uses of methyl bromide (MB) in the country and a campaign to inform local farmers that MB use as a soil fumigant is illegal; and

   (g) Monitoring and awareness activities to ensure that the TPMP is being implemented according to the phase-out plan and strategy.
SECRETARIAT’S COMMENTS AND RECOMMENDATION

COMMENTS

CFC consumption

12. According to the data reported by the Government of Papua New Guinea under Article 7 of the Montreal Protocol, CFC consumption in the country has decreased from 47.9 ODP tonnes in 2000 to 17.2 ODP tonnes in 2004. This consumption has further decreased to 15.12 ODP tonnes as indicated in the progress report submitted by the Government of Germany. CFC consumption in 2005 is about 1.9 ODP tonnes below the level of consumption that Papua New Guinea committed to address under the TPMP. The CFC baseline for Papua New Guinea is 29.1 ODP tonnes.

Verification report

13. In accordance with the agreement between the Government of Papua New Guinea and the Executive Committee, the Government of Germany submitted an independent verification report of the national consumption targets for ODS in Papua New Guinea. The report concluded as follows:

(a) That adequate legislation exists to control the import and export of ODS;

(b) That the data supplied by the importer and collated by the Ozone Unit are correct when compared with the annual returns made to the Ozone Secretariat and the Fund Secretariat;

(c) There are no significant reports received by the Ozone Unit of attempts to illegally import ODS. However, in the next few years pressure from consumers that find it difficult to convert their systems to non-CFC refrigerants, and from service workshops that have not trained their technical staff, may result in incidents of attempted illegal imports;

(d) There is some risk that MB currently imported for quarantine and pre-shipment applications might be used in controlled uses. This situation can only be assessed with field audits.

14. The verification report also contained a set of conclusions and recommendations to be addressed by relevant authorities and major stakeholders in the country. The Government of Germany indicated that all the recommendations proposed in the report will be assessed and implemented during the second phase of the TPMP.

Ratification of Montreal and Beijing amendments

15. The Fund Secretariat noted that Papua New Guinea has established a licensing system and has notified the Ozone Secretariat accordingly. However, as of 16 December 2005, Papua New Guinea had not yet ratified the Montreal Amendment (or the Beijing Amendment) to the Montreal Protocol. In light of decision XVI/32 of the 16th Meeting of the Parties (i.e., the Parties inter alia, encouraged Parties that had not ratified the Montreal Amendment to do so and also to
establish import and export licensing systems if they had not yet done so), the Secretariat suggested that, during implementation of the second phase of the TPMP, the Government of Germany assist the Government of Papua New Guinea in ratifying the Montreal Amendment (as well as the Beijing Amendment) to the Montreal Protocol.

16. Subsequently, the Government of Germany informed the Secretariat that the documentation required for ratification of the two amendments to the Protocol had already been drafted and handed over to the relevant authorities for approval. It is expected that the ratification documents will be forwarded to the United Nations in the near future.

**Sustainability of the ODS phase-out**

17. The progress report indicates that only a limited number of customs officers and refrigeration service technicians have been trained so far (i.e., 93 customs officers out of a total of 250 officers in the country and 108 refrigeration technicians of a total of 700-1,000 available in the country); the recovery and recycling network has not yet become operational; and the incentive programme for the conversion of end-users will commence only in the second phase of the TPMP. Under these circumstances, the Secretariat sought further clarification from the Government of Germany on how reductions in CFC consumption have been achieved so far and on how sustainable those reductions are in the long term considering that CFC consumption decreased from 47.9 to 15.0 ODP tonnes between 2000 and 2001 and then increased to 34.6 ODP tonnes in 2002.

18. The Government of Germany indicated as follows:

(a) Since the permit system came into effect, the three importers of ODS meet every year with relevant authorities to allocate import quotas according to the limits allowed under the TPMP. This practice has ensured that ODS consumption has declined in line with the established phase-out targets. Customs have also played a role by ensuring that all ODS imports are controlled and reported to the Department of Environment and Conservation;

(b) Import of new CFC-free equipment has become negligible in the last couple of years. This has largely been due to the involvement of equipment importers in the TPMP training and awareness activities. Additionally, a considerable amount of non-CFC refrigeration equipment is being imported from Australia. However, there is still a significant amount of second-hand CFC-based equipment that is being imported into the country, but it is expected that as soon as the ODS regulations are enforced this problem will lessen; and

(c) The low prices of CFC refrigerants have not allowed for the conversion of CFC-based refrigeration systems to alternative refrigerants. The Government of Papua New Guinea has already imposed “miscellaneous charges” on all ODS. These charges have been developed together with importers and the main refrigerator service providers. It is therefore hoped that, from 2006 onwards, a large amount of equipment will be retrofitted with non-CFC refrigerants.
Recovery and recycling and end-user incentive programmes

19. The action plan includes a request for additional funding for recovery and recycling equipment and end-user conversions. Based on the results so far achieved in the implementation of the recovery and recycling programme, and the limited number of end-users that could benefit from the incentive programme being proposed, the Secretariat suggested that the Government of Germany examines the merits of combining all of the proposed activities under one overall budget dedicated to the provision of a mix of training and equipment/service tools to be selected on the basis of the needs identified during the time remaining for implementation of the project. This suggestion has been accepted by the Government of Papua New Guinea.

Halon and methyl bromide related activities

20. For the second phase of the TPMP, funding has been requested for the halon and MB sectors. Regarding the halon sector, the Secretariat noted that the Government of Papua New Guinea has never reported any halon consumption under Article 7 of the Montreal Protocol, although the original project proposal indicates that the installed capacity in the country in 2002 was 1.5 to 4.5 metric tonnes. In regard to MB, it appears that this fumigant is being imported for quarantine and pre-shipment applications only.

21. The Government of Germany addressed the above issues as follows:

(a) In the approved project, installed capacity for halons was identified and the possibility of creating an incentive scheme was included in the action plan for the TPMP. Owners of halon installations have requested assistance under the existing budget of the TPMP, since no additional funds are available because no halon consumption was officially reported under Article 7 of the Montreal Protocol; and

(b) No funding was allocated within the TPMP for addressing MB consumption since this fumigant has so far been used only for quarantine and pre-shipment applications. The quantities of MB imported have been increasing steadily since ratification of the Copenhagen Amendment of the Protocol. In 2005, a total of 5.4 ODP tonnes of MB were imported into the country. Although the Ozone Unit has collected import data, it was considered necessary to undertake additional activities to confirm that MB is being used only for quarantine and pre-shipment applications.

Policy issue on the level of funding available for Germany

22. The total funding sought by the Government of Germany for submissions to the 48th Meeting exceeds 20 per cent of Germany’s contributions for the year 2006. This issue is addressed in document UNEP/OzL.Pro/ExCom/48/20 on bilateral funding. Consequently, although all of the conditions for approval of the second tranche of the TPMP for Papua New Guinea have been met, this request is submitted for individual consideration, since the Executive Committee’s decision will need to take into account the outcome of its deliberations on the bilateral funding issue.
RECOMMENDATION

23. Subject to the Executive Committee’s conclusions on the policy issue arising from the Government of Germany’s submissions, the Executive Committee could consider approving the TPMP for Papua New Guinea at the funding level shown in the table below, on the understanding that the Government of Germany:

(a) Will continue to ensure performance and financial verification on an annual basis;

(b) Will provide verification to the Executive Committee that the control targets listed in the agreement and the associated activities have been met; and

(c) Will ensure that technical reviews are undertaken by appropriate independent technical experts.

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Project Funding (US$)</th>
<th>Support Cost (US$)</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal phase-out management plan for ODS (second tranche)</td>
<td>220,000</td>
<td>27,300</td>
<td>Germany</td>
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