



United Nations Environment Programme

Distr. LIMITED

UNEP/OzL.Pro/ExCom/39/36 4 March 2003

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Thirty-ninth Meeting
Montreal, 2-4 April 2003

PROJECT PROPOSAL: PAPUA NEW GUINEA

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

Phase out

• Terminal phase-out management plan for ODS (1st phase)

Germany

PROJECT EVALUATION SHEET PAPUA NEW GUINEA

ODS use in sector (2001):	47.8 ODP tonnes
ODD disc in sector (2001).	17.0 ODI tomics

Sub-sector cost-effectiveness thresholds:	N/A
Sub-sector cost-effectiveness unesholds.	1 N/ A

Project Title:

(a) Terminal phase-out management plan for ODS (1st phase)

Project Data	
Enterprise consumption (ODP tonnes)	47.8
Project impact (ODP tonnes)	39.8
Project duration (months)	84
Initial amount requested (US \$)	920,000
Final project cost (US \$):	
Incremental capital cost (a)	632,500
Contingency cost (b)	
Incremental operating cost (c)	
Total project cost (a+b+c)	632,500
Local ownership (%)	100%
Export component (%)	0%
Amount requested (US \$)	632,500
Cost effectiveness (US \$/kg.)	
Counterpart funding confirmed?	
National coordinating agency	National Ozone Unit
Implementing agency	Germany

Secretariat's Recommendations	
Amount recommended (US \$)	
Project impact (ODP tonnes)	
Cost effectiveness (US \$/kg)	
Implementing agency support cost (US \$)	
Total cost to Multilateral Fund (US \$)	

1. The Government of Papua New Guinea submitted a terminal ODS phase-out management plan (TPMP) for the consideration of the Executive Committee at its 39th Meeting. Through this Plan, the Government of Papua New Guinea is requesting technical assistance to achieve a complete phase out of 47.8 ODP tonnes of controlled substances by the end of 2008.

The refrigeration sector

- 2. The current consumption of ODSs in Papua New Guinea is estimated at 47.8 ODP tonnes, mainly CFC-12 used for servicing domestic refrigerators (1.9 ODP tonnes), commercial and industrial units including fisheries (19.3 ODP tonnes), transport containers (2.1 ODP tonnes) and MAC units (24.5 ODP tonnes).
- 3. The refrigeration servicing sector consists of a diverse range of workshops, servicing all types of refrigeration and air conditioning systems; retrofits and drop-ins are not commonly practised. The number of service technicians ranges between 700 and 1,000; only a few of them have attended formal refrigeration/good service courses. On average, small workshops use 1 or 2 cylinders (each with a capacity of 13.3 kg) of refrigerant per month, while large workshops use 5 or more cylinders.
- 4. The current prices of refrigerants, which can vary greatly over a short period of time, are: US \$2.56/kg for CFC-12; US \$8.27/kg for R502; US \$3.01/kg for HCFC-22; US \$4.51/kg for HFC-134a; US \$8.50/kg for R404a; and US \$8.57/kg for R507. Both R404a and R507 refrigerants are not commonly available.

Halons and methyl bromide

- 5. The Papua New Guinea country programme (approved at the 19th Meeting of the Executive Committee) estimated the consumption of halons at 3.4 ODP tonnes. Over the last several years, the Government has reported nil consumption of halons, however, the installed capacity in the country is estimated at 18 to 26 ODP tonnes in portable fire extinguishers and from the mining company Porgera Joint Venture.
- 6. Small quantities of MB have been reported in recent years (3.6 ODP tonnes in 2002), used primarily in pre–shipment and quarantine applications. Given the uncertainty on the amounts of MB used in the country and that Papua New Guinea has not yet ratified the Copenhagen Amendment, the phase out of MB was excluded from the TPMP (relevant documents for the ratification of the Copenhagen Amendment have been forwarded to the Parliament).

Policy measures

7. Amendments were made to the 1978 Environmental Containment Act to include controls on ozone depleting substances. As such, imports of CFC-based aerosol products (since 1987) and halon-based fire extinguishers (since 1994) have been banned. In 2000 an Environment Act was issued, incorporating all environmental acts in the country, including the 1987 Containment Act).

Sub-projects in the TPMP

- 8. The TPMP consists of the following sub-projects:
 - (a) Drafting and implementing legislative and policy framework and customs training (US \$100,000): to draft ODS regulations, including a licensing/permit system establishing quotas for importers of ODSs, and specific policies to control ODS trade; assist in the approval of the draft regulations by the Cabinet; provide training to customs officers on how to identify and manage ODS and ODS-based equipment; and create awareness on the new ODS regulations;
 - (b) Training in the refrigeration servicing sector, including train the trainers (US \$75,000) training of refrigeration service technicians (US \$80,000) and training in the MAC sub sector (US \$30,000): to implement training programmes for trainers and for technicians in good servicing practices (some basic tool kits will be provided to outstanding technicians attending the courses); and training programmes for technicians servicing MAC units in the existing MAC training centres);
 - (c) Establishment of a recovery and recycling equipment network (US \$140,000): to establish a network of 16 recovery units and 6 recycling centres, including ancillary equipment, for servicing commercial and industrial refrigeration equipment, 10 MAC recovery and recycling units and 4 recovery and recycling units for the vocational schools where training is provided for refrigeration technicians;
 - (d) Retrofit of commercial refrigeration units (fishing and food processing industry) (US \$320,000) and 15,000 MAC units (US \$220,000): to establish guidelines for retrofit of refrigeration equipment, develop a plan for encouraging end users to retrofit their equipment, and establish a MAC retrofit programme to convert 5,000 units to non CFC refrigerants by end of 2005 (the Ozone Unit together with the MAC industry will develop a detailed plan to implement this initiative);
 - (e) Creation of a refrigeration association (US \$10,000) and implementation of awareness programme (US \$25,000): to promote the concept of the refrigeration association and provide assistance in its initial stages, and inform the public and the industry on a regular basis on the status of implementation of the terminal phase-out plan;
 - (f) Halons phase-out management programme (US \$50,000): To involve the fire fighting industry in outlining commercially available alternatives to halons, provide training in the use of alternatives for the different applications, develop an incentive programme for owners of halon-based units to opt for alternatives and liase with the Australian halon bank to assist in the development of a halon management plan for Papua New Guinea;

(g) Project management and monitoring (US \$150,000): To hire additional staff to strengthen the Ozone Unit to monitor and implement the activities proposed in the terminal phase-out plan.

Targets, schedule and cost of the TPMP

9. The total requested grant for the project as submitted amounts to US \$1.2 million excluding agency support costs. The project will be implemented through two implementation phases: Phase I from March 2003 to December 2005 (US \$920,000), and Phase II from January 2006 to December 2008 (US \$280,000). The expected results are:

Phases	Timeframe		ODS consumption (ODP tonnes)		*		ODS reduction (ODP tonnes)	Cost requested (US\$)
	Start	End	Start	End				
1 st phase	Mar 2003	Dec 2005	47.9	17	30.9	920,000		
2 nd phase	Jan 2006	Dec 2008	17	0	17	280,000		
Total					47.9	1,200,000		

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

- 10. At its 36th Meeting, the Executive Committee approved US \$60,000 in bilateral cooperation by the Government of Germany for the preparation of an ODS phase-out action plan for Papua New Guinea. The Government of Papua New Guinea has submitted a TPMP rather than an ODS phase out plan for the consideration of the Executive Committee at its 39th Meeting.
- 11. The following issues were identified during the review of the TPMP and were raised by the Fund Secretariat, and addressed by the Government of Germany:

Issues raised at the 14th Meeting of the Parties

- 12. The Secretariat pointed out that the Parties to the Montreal Protocol noted at their 14th Meeting that Papua New Guinea (among other Article 5 countries), reported annual data for either 2000 or 2001 which is above their baseline and, in the absence of further clarification, Papua New Guinea is presumed to be in non-compliance with the control measures under the Protocol (Decision XIV/17).
- 13. The Government of Germany informed the Secretariat that Papua New Guinea is currently in non-compliance with its obligations to the Montreal Protocol. Also, in November 2002, Papua New Guinea submitted to the Ozone Secretariat a report on ODS consumption in the country and would submit to the Implementation Committee the plan of action, as proposed by the Government in the TPMP, to ensure compliance with the provisions of the Montreal Protocol.

Requirements for submission of terminal plans by LVC countries

- 14. The Secretariat pointed out that the project proposal could only be considered as an RMP project, in conformity with Decision 31/48, and not as a terminal plan. The latter is based on Decision 38/64(a) which, *inter alia*, states that "requests for funding of terminal CFC phase-out plans for LVC countries might be considered on a case-by-case basis, provided that, among others, the country concerned has a licensing system in operation and has enacted or improved legislation to phase out ODS consumption".
- 15. The Government of Germany responded that Decision 38/64 only relates to countries which already have an approved RMP project or ODS phase-out activities (ongoing or implemented). However, this was not the case for Papua New Guinea, where no phase-out activities have so far been approved. Furthermore, the Government of Papua New Guinea requested for a TPMP rather than a RMP, taking into consideration the non-compliance status of the country.

Issues related to ODS legislation in Papua New Guinea

- 16. The TPMP included a request for drafting and implementing a legislative and policy framework and implementing customs training programmes (US \$100,000). The Secretariat pointed out that this activity would constitute double counting, taking into consideration that the level of funding approved by the Executive Committee for the preparation of an ODS phase-out action plan for Papua New Guinea (US \$60,000), was double the amount that was approved in the past for similar activities. This was done on the understanding that relevant ODS legislation should be prepared at the time of the preparation of the phase-out plan to avoid any delays in the implementation of the sub-projects in the phase-out plan (as per Decision 31/48).
- 17. The Government of Germany informed the Secretariat that since no phase-out activities have been undertaken so far in the country, funds approved for the preparation of the TPMP were utilised to assess the current sectoral ODS consumption in the country and to increase awareness among the industrial sector on ODS phase-out issues and on means to achieve compliance. However, the Government of Papua New Guinea has committed to finalise relevant ODS regulations, including a licensing and quota system, by the end of 2003, without further assistance from the Fund.

Participation of Papua New Guinea in activities proposed for the Pacific Island Countries (PIC)

18. The Secretariat pointed out that the TPMP for Papua New Guinea was proposed to be implemented without taking into consideration ODS phase-out commitments and strategies in the Pacific Island Countries (PIC) which included Papua New Guinea. Specifically:

- (a) At the 13th Meeting of the Parties, the Pacific Island Countries agreed to work together in the context of a regional strategy that all countries shall: ratify the Montreal Protocol and its amendments; adopt ODS import/export controls, particularly licensing systems and appropriate legislation; phase out consumption of ODSs; report data to the Ozone Secretariat under Article 7, and commit the accelerated phase out of CFCs, preferably by 2005 (the Declaration of the Pacific Island Countries could be found in document UNEP/OzL.Pro.13/10);
- (b) At its 36th Meeting, the Executive Committee approved a CFC phase-out strategy covering eight Pacific Island Countries (Kiribati, Marshall Islands, Micronesia, Palau, Solomon Islands, Tonga, Tuvalu and Vanuatu). Some of the activities proposed in the strategy (training of custom officers and refrigeration technicians, and meetings for discussion of issues related to the implementation of the phase-out strategies) included the participation of Papua New Guinea.
- 19. The Government of Germany responded that at the time of the preparation of the PIC strategy, Papua New Guinea agreed to be part of the strategy to ensure regional co-ordination, but the Government will propose additional phase-out activities for implementation at the national level. Specifically, while Papua New Guinea agreed to be part of this activity, the PIC strategy was developed prior to conducting an ODS survey/assessment in Papua New Guinea and, therefore, the provisions included in the PIC strategy would not be sufficient to assist Papua New Guinea in phasing out its ODS consumption.
- 20. Upon a suggestion by the Fund Secretariat, the Governments of Germany and Australia and UNEP started discussions for co-ordinating efforts for joint implementation of the Papua New Guinea TPMP and the PIC strategy. Since January 2003, several communications were exchanged among the three parties to enhance the co-ordination of activities.

Issues regarding the refrigeration servicing sector

- 21. Pursuant to Decision 38/38, the Secretariat pointed out that the implementation of the customs training programme, the recovery and recycling network, the retrofit of commercial refrigeration equipment and MAC units, could only commence once the legislation controlling CFC imports is in place and measures had been taken to ensure that the local market prices of CFCs and non-ODS refrigerants were similar.
- 22. The Government of Germany indicated that the drafting of legislation, development of a licensing system and training of refrigeration technicians will be the first activities to be implemented. The other proposed activities would be implemented in 2004, once the conditions are conducive for their successful implementation.
- 23. Regarding the CFC recovery and recycling programme included in the TPMP (10 MAC recovery/recycling units, 16 recovery units and ancillary equipment), the Secretariat pointed out that at its 38th Meeting, the Executive Committee decided that for CFC recovery and recycling programmes, the implementing agencies would examine the possibility of collaboration for leveraging additional financing (i.e., GEF) for acquisition of recovery and recycling units that could service both HFCs and CFCs (Decision 38/38).

- 24. The Government of Germany responded that the TPMP for Papua New Guinea proposal was already prepared at the time the Executive Committee's Meeting was held. Therefore, it was not possible to explore the feasibility of securing financial resources outside the Multilateral Fund. It is also to be noted, that the TPMP has only included a limited number of recovery/recycling machines which are critical to meet the CFC phase-out targets proposed in the TPMP.
- 25. The Fund Secretariat sought clarification from the Government of Germany on other issues related to the refrigeration servicing sector, including the subsectoral distribution of CFCs, prices and availability of refrigerants (CFCs and non-CFCs); the level of technical skills of the servicing technicians in the country, and whether the lower prices of CFC refrigerants compared with non-CFC alternatives have enticed consumers to widely use CFCs even in non-CFC based equipment. Regarding the latter issue, the Government of Germany reported that all service workshop surveyed stated that they were not servicing non-CFC based equipment with CFCs. However, it was not possible to rule out such a practice.

Level of funding requested

- 26. The Secretariat informed the Government of Germany that it was unable to recommend the level of funding requested for the TPMP for Papua New Guinea (US \$1,200,000) taking into consideration:
 - (a) The level of ODS consumption in the country and its sectoral distribution;
 - (b) The funding requested for the development of legislation/licensing system is ineligible since it would constitute-double counting;
 - (c) The total amount of CFC-12 potentially to be recovered is uncertain and the effectiveness and sustainability of retrofitting refrigeration equipment to non-ODS refrigerants is in doubt taking into account the age of the equipment and the lower price of CFC-12 compared to other alternative refrigerants;
 - (d) The training programmes for customs officers and refrigeration servicing technicians already developed in the approved PIC strategy;
 - (e) The level of funding requested for the halon sector should be US \$25,000 on the basis of guidelines for projects in the halon sector (Decision 18/22).
- 27. The Secretariat also noted that in light of Decision 31/48 (i.e., the level of funding for new RMPs to achieve the 50% and 85% reductions in CFC consumption by 2005 and 2007, respectively could be increased by up to 50% compared to the level of RMP funding typically approved), the level of funding for an RMP project for Papua New Guinea would be US \$450,000. However, the cost of a project proposal to achieve the complete phase out in the CFC consumption would be about US \$650,000.
- 28. The Government of Germany indicated that the TPMP for Papua New Guinea was not envisaged as a RMP but as a terminal phase-out plan and, therefore, included more stringent

phase-out commitments and schedules. The Government is fully aware and in agreement that based on the requirements of the TPMP, the country will be entitled to receive funding against actual reductions in CFC consumption and that no further funding will be available to Papua New Guinea for any other phase-out activity. The Government of Germany also adjusted the project cost to US \$887,500.

29. The sub-projects included in the TPMP for Papua New Guinea are similar to activities approved in several other Article 5 countries, either under RMP or TPMP projects. However, the revised budget of the TPMP is almost double the amount that has been approved in countries with a similar level of CFC consumption to achieve the 50 per cent and 85 per cent reductions of their CFC baseline.

Relationship to the three-year phase out plan

30. The replenishment of the Multilateral Fund as adopted by the Parties at their 14th Meeting (Decision XIV/39) was based on the requirements by all Article 5 countries, including LVC countries, to achieve their immediate phase-out targets of the Montreal Protocol (i.e., the 2005 and 2007 targets for CFC and the 2005 targets for halons, TCA, CTC and methyl bromide). Furthermore, the three-year phase out plan of the Multilateral Fund during the 2003-2005 period, as agreed by the Executive Committee, was also based on achieving the immediate phase-out targets of the Montreal Protocol. Therefore, the additional resources needed for an accelerated phase out of ODSs in Article 5 countries were not accounted for during the 2003-2005 period.

Draft agreement

31. A draft Agreement for the TPMP for Papua New Guinea between the Government of Papua New Guinea and the Executive Committee is attached to this document.

RECOMMENDATION

- 32. In light of the above comments, the Executive Committee may wish to consider approving, without prejudice to the operation of the Montreal Protocol's mechanism dealing with non-compliance issues, US \$450,000 for achieving the 2005 and 2007 CFC phase out targets (phase out of 29.6 ODP tonnes in 2005 and additional 12.7 ODP tonnes in 2007), respectively.
- 33. Alternatively, the Executive Committee may wish to consider whether the TPMP at the requested cost of US \$887,500 for the phase out of 47.8 ODP tonnes of CFCs (all CFC consumption) by 2008, is appropriate at this time.

Annex I

AGREEMENT FOR THE TERMINAL ODS PHASE-OUT MANAGEMENT PLAN FOR PAPUA NEW GUINEA (DRAFT)

- 1. The Executive Committee approves a total of [US \$887,500] in funding for the phased reduction and complete phase-out in the consumption of Annex A, Group I substances used in the Papua New Guinea. This is the total funding that would be available to the Papua New Guinea from the Multilateral Fund for the total elimination of CFC use in Papua New Guinea. The agreed level of funding would be paid out in instalments in the exact amount of US dollars specified in paragraph 2, and on the basis of the understanding set out in this agreement.
- 2. By this agreement, Papua New Guinea commits that in exchange for the funding level specified below, it will eliminate its total CFC consumption in accordance with the annual consumption limits given in Table 2.

Table 1: Funding levels under the TPMP for Papua New Guinea

Funding level (US\$)	2003	2004	2005	2006	2007	Total
Project costs	632,500			255,000		887,500
Agency support costs	79,575			28,050		107,625
Total costs	712,075			283,050		995,125

Table 2: Maximum allowable consumption for Annex A, Group I substances

Year	Consumption (ODP tonnes)
April 2003 – March 2004	35.0
April 2004 – March 2005	26.0
April 2005 – March 2006	17.0
April 2006 – March 2007	8.0
April 2007 – December 2007	4.5
2008 - 2010	0

- 3. The Executive Committee also agrees in principle that the funds will be provided at the first meeting of the Executive Committee in 2003 and 2006 in accordance with Table 1 for the exact amounts listed in the table and on the basis of an annual implementation plan for the following implementation period, subject to the performance requirements contained in this agreement. On this basis, the payment indicated in year 2003 will be for activities to be undertaken from 2003 to 2005; while payment in the year 2006 will be for activities in 2006 and 2007.
- 4. Payments noted in Table 1, other than the 2003 implementation programme, will be released based on confirmation that the agreed phase-out amounts targets noted in Table 2 for the previous year have been achieved and it has been verified that the activities planned for the

previous year were undertaken in accordance with the annual implementation plan. Hence, payment in 2006 would be released based on confirmation that the April 2004 – March 2005 consumption target had been met and all 2003 –2005 implementation plan activities had been completed.

- 5. The Government of Papua New Guinea also agrees to ensure accurate monitoring of the phase-out. The Government of Papua New Guinea will provide regular reports, as required by its obligations under the Montreal Protocol and this Agreement. Consumption figures provided under this agreement will be consistent with Papua New Guinea's reports to the Ozone Secretariat under Article 7 of the Montreal Protocol.
- 6. The Government of Papua New Guinea also agrees to allow independent verification audits as provided for in this agreement, and in addition, external evaluation as may be directed by the Executive Committee, to verify that annual CFC consumption levels correspond to those agreed in Table 2.
- 7. The Papua New Guinea Terminal CFC Phase-out Management Plan, which supports this Agreement, the Papua New Guinea Country Programme and other related documentation, may include estimates of specific funds that were thought to be needed for specific items. Notwithstanding this, the Executive Committee wishes to provide Papua New Guinea with maximum flexibility in using the agreed funds to meet the consumption limits agreed in the Table 2. The Executive Committee has the understanding that during implementation, as long as it is consistent with this Agreement, the funds provided to Papua New Guinea pursuant to this Agreement may be used in any manner that Papua New Guinea believes will achieve the smoothest possible CFC sector phase-out, consistent with operational procedures as agreed between the Government of Papua New Guinea and the Government of Germany in the Terminal Phase-out Management Plan and as indicated in the implementation programmes.
- 8. The Government of Papua New Guinea agrees that the funds being agreed in principle by the Executive Committee at its 39th Meeting for the complete phase-out of Annex A, Group I substances are the total funding that will be available to Papua New Guinea to enable its full compliance with the reduction and phase out as agreed with the Executive Committee of the Multilateral Fund, and that no additional Multilateral Fund resources will be forthcoming for any related activities. It is also understood that aside from the agency fee referred to in paragraph 10 below, the Government of Papua New Guinea, the Multilateral Fund, its implementing agencies, and bilateral donors will neither request nor provide further Multilateral Fund related funding for the accomplishment of the total phase-out of CFC in the country.
- 9. The Government of Papua New Guinea agrees that if the Executive Committee meets its obligations under this Agreement, but the Government of Papua New Guinea does not meet the reduction requirements outlined in paragraph 2, and other requirements outlined in this document, the implementing agency and the Multilateral Fund will withhold funding for the subsequent tranche of funding outlined in paragraph 2 until such time as the required reduction has been met. It is clearly understood that the fulfilment of this agreement depends on the satisfactory performance of its obligations by both the Government of Papua New Guinea and the Executive Committee. In addition, Papua New Guinea understands that regarding all calendar

year targets beginning with 2003-2004 annual period, in paragraph 2 of this agreement, the Multilateral Fund will reduce the subsequent tranche and therefore the total funding for CFC phase out on the basis of US \$15,000 per ODP tonne of reduction not achieved in any year.

- 10. The Government of Germany has agreed to be the implementing agency for the implementation of this Terminal Phase-out Management Plan, which will be completed in 2007. A total agency fee of US \$107,625 has been agreed in accordance with provisions of this Agreement and distributed as shown in Table 1. The Government of Germany would be responsible for the following:
 - (a) Ensuring performance and financial verification in accordance with specific Government of Germany procedures and requirements as specified in Papua New Guinea CFC Phase-out Management Plan;
 - (b) Reporting annually on the implementation of the annual implementation programmes;
 - (c) Providing verification to the Executive Committee that the control targets listed in Table 2 and the associated activities have been met;
 - (d) Ensuring that technical reviews undertaken by the Government of Germany are undertaken by appropriate independent technical experts;
 - (e) Assisting Papua New Guinea in preparation of annual implementation programmes, which will incorporate achievements in previous annual programmes;
 - (f) Carrying out required supervision missions;
 - (g) Ensuring the presence of an operating mechanism to enable effective, transparent implementation of the programme, and accurate data reporting;
 - (h) Ensuring that disbursements are made to Papua New Guinea based on agreed performance targets in the project and provisions in this Agreement; and
 - (i) Provide policy development assistance when required.

11. The funding components of this Agreement shall not be modified on the basis of future Executive Committee decisions that may affect the funding of any other consumption sector projects or any other related activities in the country.
