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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Seventy-seventh Meeting
Montreal, 28 November – 2 December 2016

PROJECT PROPOSAL: PAPUA NEW GUINEA

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

Papua New Guinea

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2015	2.32 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2015	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123				0.0	0.0				0.0
HCFC-124				0.0	0.0				0.0
HCFC-141b				0.0	0.0				0.0
HCFC-142b				0.0	0.0				0.0
HCFC-22				0.0	2.3				2.32

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	3.3	Starting point for sustained aggregate reductions:	3.4
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	3.4	Remaining:	0

(V) BUSINESS PLAN		2016	2017	2018	2019	2020	Total
Germany	ODS phase-out (ODP tonnes)	0.8	0.0	0.0	0.0	0.4	1.2
	Funding (US \$)	336,518	0	0	0	149,812	486,330

(VI) PROJECT DATA		2011	2013	2014	2015	2016	2017-2019	2020	2021 - 2024	2025	Total
Montreal Protocol consumption limits		n/a	3.4	3.4	3.1	3.1	3.1	2.2	2.2	1.2	n/a
Maximum allowable consumption (ODP tonnes)		n/a	3.2	3.1	2.9	2.6	2.3	1.4	0.9	0.0	n/a
Agreed funding (US\$)	Germany										
	Project costs	350,000	340,000	0	0	301,000		134,000	0.0	125,000	1,250,000
	Support costs	41,300	40,120	0	0	35,518		15,812	0.0	14,750	147,500
	Funds approved by ExCom (US\$)										
	Project costs	350,000	340,000	0	0	0.0	0.0	0.0	0.0	0.0	690,000
	Support costs	41,300	40,120	0	0	0.0	0.0	0.0	0.0	0.0	81,420
Total funds requested for approval at this meeting (US\$)	Project costs	0	0	0	0	301,000	0	0	0	0	301,000
	Support costs	0	0	0	0	35,518	0	0	0	0	35,518

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Papua New Guinea, the Government of Germany as the designated implementing agency, has submitted to the 77th meeting a request for funding for the third tranche of the HCFC phase-out management plan (HPMP)¹, at the amount of US \$301,000, plus agency support costs of US \$35,518. 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 2017 to 2020.

Report on HCFC consumption

2. The Government of Papua New Guinea reported a consumption of 2.32 ODP tonnes of HCFC in 2015. The 2011-2015 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Papua New Guinea (2011-2015 Article 7 data)

HCFC-22	2011	2012	2013	2014	2015	Baseline
Metric tonnes	30.81	55.71	54.95	52.2	42.2	60
ODP tonnes	1.69	3.06	3.02	2.87	2.32	3.3

3. The country's HCFC consumption consists primarily of HCFC-22 used solely in the servicing sector. HCFC consumption in Papua New Guinea has been decreasing since 2013 as a result of the activities in the refrigeration servicing sector implemented in the HPMP, and the implementation of the import/export quota system by the Government.

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 consumption of HCFCs for 2015 of 2.32 ODP tonnes was in compliance with the Montreal Protocol and with the targets established in the Agreement between the Government of Papua New Guinea and the Executive Committee.

Country programme (CP) implementation report

5. The Government of Papua New Guinea reported HCFC sector consumption data under the 2015 CP implementation report which 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 and institutional strengthening

6. The Government of Papua New Guinea is amending their current ozone regulation to include a ban on the import of HCFC-based equipment (by mid-2017) and the inclusion of hydrofluorocarbons (HFC) in the country's licensing system (by beginning of 2018). The revised regulation will be published in the National Gazette once approved.

7. The influx of domestic refrigeration equipment using HC-600a prompted the Government to develop a legal framework to adopt, implement and enforce regulations, codes of practices and standards for the use of flammable/toxic refrigerants for all equipment that may use those refrigerants. This process

¹ As per the letter of 30 September 2016 from the Conservation and Environment Protection Authority of Papua New Guinea to the Secretariat.

is ongoing. Sixty-two customs and enforcement officers were trained on enforcement of ODS-related regulations.

8. Activities related to institutional strengthening such as data collection and reporting, awareness raising, and coordination with various stakeholders in Papua New Guinea continue to be implemented.

Refrigeration servicing sector

9. Ten recovery units, 40 recovery cylinders and 10 manifold sets were purchased and distributed to refrigeration and air-conditioning (RAC) technicians; and equipment (e.g., HC-based refrigerators and air-conditioners (AC), manifold sets, leak detector, recovery unit, and vacuum pump) was provided for training centres for the conduct of HC refrigerants training; 52 technicians were trained on good refrigeration practices; and the training manual/curriculum was upgraded. Fifteen trainers were trained on safe handling of HC refrigerants and additional three trainers were trained in Germany on safe handling of HCs, HCFC alternatives, and natural refrigerants.

Awareness and communication

10. Three stakeholder workshops to provide information on HFCs, conversion of HCFC- and HFC-based equipment to ozone- and climate-friendly technology, relevant regulations and Customs requirements, were conducted with 90 participants; information materials were distributed to the RAC industry and the Customs office; and Ozone day celebrations were conducted (e.g., poster design competitions for schools; information on the ODS licensing system, and new alternatives to ODS).

Project implementation and monitoring unit (PMU)

11. The National Ozone Unit (NOU) located with the Conservation Environment Protection Authority (CEPA) continues to be responsible for coordinating the implementation of activities of the HPMP. In 2017, the NOU will assign a dedicated PMU officer who will be responsible for monitoring activities to be implemented and support the NOU officer when required.

Level of fund disbursement

12. As of September 2016, of the US \$690,000 so far approved, US \$433,534 had been disbursed (Table 2). The balance of US \$256,466 will be disbursed by 2017.

Table 2. Financial report of stage I of the HPMP for Papua New Guinea (US \$690,000)

Agency	First tranche (US \$)		Second tranche (US \$)		Total approved (US \$)	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
Germany	350,000	350,000	340,000	83,534	690,000	433,534
Disbursement rate (%)	100%		24.6%		62.8%	

Implementation plan for the third tranche of the HPMP

13. The following activities will be:

- (a) Two training courses for 50 Customs officers on enforcement of ODS regulations, and finalizing standards and guidelines for the use of flammable refrigerants in equipment (US \$11,000);
- (b) Three training courses for 100 technicians on recovery of refrigerants during service practices; hands-on brazing techniques to reduce leakage of refrigerants; theory on solder free technology; and safe handling of flammable refrigerants and their use in equipment (US \$15,500);

- (c) An end-user incentive pilot project (in 2019) to promote the use of HC-290 air-conditioning (AC) in Port Moresby; another pilot project to demonstrate the use of CO₂ in the commercial refrigeration sector and the use of HC-290 in a cold room system for the fisheries and food processing sectors (US \$134,500);
- (d) An end-user incentive programme for the import and installation of R-290-based AC units to demonstrate successful conversion/retrofitting of HCFC-based equipment with low-GWP refrigerants (funding from second tranche);
- (e) Awareness activities including two stakeholder workshops for 100 participants about the HPMP and development of awareness materials (US \$12,000);
- (f) Coordination, assessment, evaluation, and reporting of the implementation of all the HPMP activities (US \$58,000); and
- (g) Activities related to institutional strengthening including collection, analysis and reporting of consumption data; this budget will also include running costs related to NOU as well as office equipment requirements and Ozone day celebrations and other awareness activities (US \$70,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Legal framework

14. The Government of Papua New Guinea has already issued HCFC import quotas for 2017 at 2.26 ODP tonnes, which is consistent with its Agreement with the Executive Committee.

Refrigeration servicing sector

15. The Government of Germany confirmed that training activities for service technicians will be made sustainable through collaboration with academic institutions, in particular, Port Moresby Technical College, the Government-recognised institute that conducts RAC training courses. Training equipment will also be provided to two other colleges (i.e., Australia Pacific Technical College and Don Bosco Technical Institute) in order to promote good practices in refrigeration training programmes.

16. Implementation of the end-user incentive programme which aimed to demonstrate cases of successful conversion/retrofitting of HCFC-based RAC equipment was included as part of the second tranche. The Government of Germany indicated that as the initial alternative considered for this programme was an HFC which was not consistent with the country's carbon-neutral policy, this has been postponed for 2017 when it is expected that safety considerations for the use of HC would be in place. It also indicated that the Government of Papua New Guinea and the refrigeration association are aware of the decisions² of the Executive Committee regarding retrofits, and are fully committed to ensuring that all safety considerations are taken into account if and when retrofitting is done.

Conclusion

17. Implementation of the HPMP in Papua New Guinea is progressing. HCFC consumption in 2015 was 30 per cent below the baseline, which demonstrates compliance with the accelerated reduction schedules committed by the Government. The activities in the servicing sector will be sustainable through

² Decisions 72/17 and 73/34.

capacity built with academic institutions and the participation of the refrigeration association. It is also expected that the import of equipment using or containing HCFC will be banned by mid-2017.

RECOMMENDATION

18. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the second tranche of stage I of the HCFC phase-out management plan of (HPMP) for Papua New Guinea; and further recommends blanket approval of the third tranche of stage I of the HPMP for Papua New Guinea, and the corresponding 2017-2020 tranche implementation plan at the funding levels shown in the table below, on the understanding that if and when Papua New Guinea were to decide to proceed with retrofits and associated servicing to flammable and toxic refrigerants in refrigeration and air-conditioning equipment originally designed for non-flammable substances, it would do so assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols:

	Project title	Project funding (US \$)	Support cost (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage I, third tranche)	301,000	35,518	Germany