UNITED NATIONS





United Nations Environment Programme Distr. GENERAL

UNEP/OzL.Pro/ExCom/71/36 11 November 2013

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Seventy-first Meeting Montreal, 2-6 December 2013

PROJECT PROPOSAL: INDONESIA

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

Phase-out

• HCFC phase-out management plan (stage I, second tranche) UNDP, UNIDO, the World Bank, Australia

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Indonesia

(I) PROJECT TITLE	AGENCY
HCFC phase out plan (Stage I)	Australia, UNDP (lead), UNIDO, World Bank

(II) LATEST ARTICLE 7 DATA (Annex C Group l)	Year: 2012	329.38 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2012
Chemical	Aerosol	Foam	Fire fighting	Refrigera	Refrigeration		Process agent	Lab Use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123			1.8		2.0				3.8
HCFC-124									
HCFC-141b		78.4		42.2					120.6
HCFC-142b					1.6				1.6
HCFC-22				34.2	167.2				201.4
HCFC-225						1.9			1.9

(IV) CONSUMPTION DATA (ODP tonnes)									
2009 - 2010 baseline:	2009 - 2010 baseline: 403.9 Starting point for sustained aggregate reductions: 40								
	CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)								
Already approved:	135.00	Remaining:	268.92						

(V) BUSINESS PLAN		2013	2014	2015	2016	2017	2018	Total
World Bank	ODS phase-out (ODP tonnes)	10.4		1.5			1.5	13.4
	Funding (US \$)	1,013,475		145,888			145,888	1,305,251
UNDP	ODS phase-out (ODP tonnes)	44.3	0.0	5.0	0.0	0.0	4.9	54.3
	Funding (US \$)	4,300,000	0	490,310	0	0	478,375	5,268,685

(VI) PRO	DJECT DAT	A	2011	2012	2013	2014	2015	2016	2017	2018	Total
Montreal	Protocol cons	sumption limits	n/a	n/a	403.9	403.9	363.51	363.51	363.51	363.51	n/a
Maximur tonnes)	n allowable co	onsumption (ODP	n/a	n/a	403.9	403.9	363.51	363.51	363.51	323.12	n/a
Agreed	Australia	Project costs	300,000	0	0	0	0	0	0	0	300,000
funding (US \$)		Support costs	39,000	0	0	0	0	0	0	0	39,000
(03 \$)	UNDP	Project costs	4,000,000	0	4,000,000	0	456,102	0	0	445,000	8,901,102
		Support costs	300,000	0	300,000	0	34,208	0	0	33,375	667,583
	UNIDO	Project costs	777,395	0	0	0	0	0	0	0	777,395
		Support costs	58,305	0	0	0	0	0	0	0	58,305
	World	Project costs	1,500,000	0	942,767	0	135,710	0	0	135,710	2,714,187
	Bank	Support costs	112,500	0	70,708	0	10,178	0	0	10,178	203,564
	proved by	Project costs	6,577,395								6,577,395
ExCom (US \$)	Support costs	509,805								509,805
	ds requested	Project costs		0	4,942,767						4,942,767
for appro meeting (val at this US \$)	Support costs		0	370,708						370,708

Secretariat's recommendation:	For individual consideration
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PROJECT DESCRIPTION

1. On behalf of the Government of Indonesia, UNDP as the lead implementing agency, has submitted to the 71st meeting of the Executive Committee a request for funding for the second tranche of stage I of the HCFC phase-out management plan (HPMP) ¹ at the amount of US \$5,313,475, consisting of US \$4 million plus agency support costs of US \$300,000 for UNDP, and US \$942,767 plus agency support costs of US \$70,708 for the World Bank. The submission includes the progress report on the implementation of the first two years of the HPMP and the tranche implementation plan for 2014 and 2015.

Progress report on the implementation of tranches of the HPMP

- 2. The HPMP of Indonesia consists of phase-out of HCFC-141b in the foam sector, implemented by the World Bank and UNIDO, activities for HCFC phase-out in the air-conditioning refrigeration sector implemented by UNDP, and technical assistance for refrigerant management implemented by the Government of Australia.
- 3. In 2012 the Minister of Trade issued a decree to control the import of ODS including the need for importing licenses and permits issued by the Ministry of Trade based on recommendation from the Ministry of Environment and the Ministry of Industry. The import quota has been determined and distributed to 31 importers. To facilitate adoption of HFC-32 by industry, the Government has established a regulation removing HFC-32 from the list of highly flammable substances. The Ministry of Industry is currently developing standards for the safe use of HFC-32 in refrigeration and air-conditioning equipment.
- 4. The report provided by UNDP informs that the Government signed with UNDP a project document in March 2012, with the World Bank a grant agreement in July 2013, and with UNIDO a project document in June 2013. UNDP informs that technical assistance has been provided by the Ministry of Environment to refrigeration and air conditioning sector enterprises on design and establishment of work plans, and introduction of, in particular, HFC-32 technology. The World Bank has held a mini-workshop for three larger foam enterprises, and these enterprises have submitted detailed project proposals for the conversion of their production lines to hydrocarbon technology to the National Ozone Unit. In the air conditioning and refrigeration manufacturing sector the Government signed performance-based memorandum of agreements with eight enterprises in June 2013; in the foam sector, the World Bank and UNIDO signed similar agreements in September and October 2013, respectively. An overview of the agreements with beneficiary enterprises is provided in Table 1.

Table 1 - Status on agreements with beneficiary enterprises

Sector	Agency	No. of	ODS	Consumption	Alternative
		enterprises		(mt)	technology
Commercial	UNDP	3	HCFC-22	76.62	HFC-32
refrigeration			HCFC-141b	115.58	Pentane
Commercial air conditioning	UNDP	4	HCFC-22	169.12	HFC-32
Residential air conditioning	UNDP	1	HCFC-22	184.34	HFC-32
Foam	World Bank	3	HCFC-141b	150.00	Pentane
	UNIDO	4	HCFC-141b	94.11	Pentane

¹ The HPMP for Indonesia was approved by the Executive Committee at its 64th meeting, to reduce HCFC consumption by 20 per cent by1 January 2018.

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Disbursement

5. The submission contained information on disbursement up to 7 October as shown in Table 2. While the disbursement at that time amounted only to 6.7 per cent of the overall funds approved for the first tranche will increase in the following six weeks to 27.6 per cent of the approved tranche.

Agency UNDP World UNIDO Australia Total Bank 1,500,000 777,395 300,000 4,000,000 6,577,395 Approved (US \$) Disbursed 160,365 250,000 0 30,000 440,365 Status (US \$) disbursement Share of 4.0% 16.7% 0.0% 10.0% 6.7% (7 October 2013) approved Disbursed 1.538,434 250,000 0 30,000 1.818.434 Status disbursement (US \$) (planned for Share of 38.5% 16.7% 0.0% 10.0% 27.6% **18 November 2013** approved

Table 2 - Disbursement

Annual plans for the second tranche

6. For the refrigeration and air conditioning as well as the foam sectors, it is planned to sign the remaining contracts with beneficiary enterprises in the first six months of 2014, followed by procurement, prototype and, subsequently, commercial manufacturing. Completion of the activities are planned before the end of 2015. The service sector will focus on the upgrade of curricula in the beginning of 2014, the finalisation of modalities for the stewardship programme throughout 2014, and awareness activities taking place in late 2014 and early 2015. Consultations with industry as well as review of activities and reporting will be undertaken throughout the two years by the Project Management Unit (PMU).

Licensing and quota system

7. The Government of Indonesia provided a letter confirming that an enforceable national system of licensing and quotas for HCFC imports is in place and that the system is capable of ensuring the country's compliance with the Montreal Protocol HCFC phase-out schedule. The import quota for 2013 has been established at 403.9 ODP tonnes, which is the level of the baseline.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Status reflected in this documentation

8. The original submission of the tranche request for the HPMP contained only limited information, insufficient for any recommendation by the Secretariat. A second version and, subsequently, additional data were requested, forming the basis for the above description as well as the Secretariat's comments and analysis. The document includes disbursements expected up to 18 November 2013, and progress in activities achieved in September and October 2013.

HCFC consumption

9. Table 3 presents the consumption of different HCFCs in Indonesia.

2010 2009 2011 2012 **Baseline** Substance Metric tonnes HCFC-22 4.327.0 5.396.8 3,909.6 3,662.4 4.861.9 HCFC-123 318.0 66.4 311.7 190.9 192.2 HCFC-124 0.1 0.1 0.0 0.0 0.1 HCFC-141b 1,225.8 1,009.9 1,205.9 1,186.0 1,096.4 HCFC-142b 0.0 0.0 64.1 24.9 0.0 HCFC-225 0.6 0.0 14.0 27.3 0.3 **ODP** tonnes HCFC-22 237.99 296.82 215.03 201.43 267.40 HCFC-123 6.36 1.33 6.23 3.82 3.84 HCFC-124 0.00 0.00 0.00 0.00 0.00 HCFC-141b 134.84 130.46 111.09 120.60 132.65 HCFC-142b 0.00 0.00 4.17 1.62 0.00

Table 3 – Consumption of HCFC in Indonesia

10. The HCFC baseline for compliance has been established, based on consumption data reported under Article 7 of the Montreal Protocol, at 403.9 ODP tonnes. The consumption of HCFC-142b has increased from a zero baseline to 64.1 metric tonnes (mt) in 2011 and then has dropped to 24.9 mt in 2012. UNDP provided clarification that HCFC-142b was imported as a component of refrigerant blends for servicing refrigeration equipment formerly using CFC-12 as refrigerant. The 2012 consumption of Indonesia was 18.5 per cent lower than the baseline consumption.

0.00

433.00

0.98

337.50

1.91

329.38

0.02

403.9

Level of implementation of activities achieved

HCFC-225

Total

The Secretariat requested information on progress of the implementation of the different 11. investment activities, and analysed the data received. An overview is provided in Table 4.

Table 4 - Progress in implementation of investment activities

0.04

374.85

Progress	Agency	Implementation commenced	enterprise r	Agreement with enterprise reached and procurement initiated		or equipment orded
			Share of agency phase-out	Share of country phase-out	Share of agency phase-out	Share of country phase-out
Refrigeration sector contracts Air conditioning	UNDP UNDP	Between March and June 2013	31.1%	12.9% 14.8%	0.0%	0.5%
sector contracts Foam sector contracts	World Bank	September 2013	49.2%	12.6%	0.0%	0.0%
	UNIDO	October 2013	94.0%	7.9%	0.0%	0.0%
Aggregated	-	Between March and October 2013	n/a	48.2%	n/a	0.5%

- 12. As of November 2013, implementation has commenced in 15 enterprises representing 48.2 per cent of the phase-out to be achieved through investment projects under stage I of the HPMP. In all cases procurement of equipment was initiated, but only in one enterprise, relating to 0.5 per cent of the planned phase-out, a contract for the supply of equipment has been awarded.
- 13. The non-investment components of the sector plan are showing progress in their implementation. A number of preparatory activities to increase the acceptance of HFC-32 as an alternative refrigerant have been implemented, and the Government and UNDP continue to provide technical assistance to manufacturers as needed. Implementation of activities relating to a stewardship programme is progressing.

Reduction of consumption

14. UNDP provided information on the implementation of activities at the enterprise and production line level including HCFC consumption (by substance), alternative technologies selected, milestones achieved (i.e. dates of signing of contract and completion for the different conversion activities). Based on this information, the Secretariat prepared Table 5.

Estimated activity completion date	Phase	-out (ODP t)	Phase-out foreseen in the plan (ODP t)	Phase-out as sh	are of plan phase-out
	-	Aggregated		-	Aggregated
2014 – 3 rd quarter	10.35	10.35	125	7.67%	7.67%
2014 – 4 th quarter	52.69	63.04	135	39.03%	46 70%

Table 5 - Plan and actual reduction of HCFC in the Indonesia HPMP

- 15. In 2012, Indonesia's consumption was 9 per cent below the 2015 reduction step, and no conversion activities had been implemented. The implementation of activities will phase out an additional 63 ODP tonnes before 2015, and will further offset potential growth and reduce consumption towards future reduction targets.
- 16. Stage I of the HPMP for Indonesia appears to have reached a significant level of implementation of activities initiated with the first tranche. For the introduction of HFC-32 technology in some of the refrigeration and air conditioning activities, additional preparatory and awareness efforts had to be undertaken and enterprises needed to be convinced; this would explain certain delays. However, progress in implementation of activities at the enterprise level should have been more advanced.

Revision to the Agreement of the HPMP

17. The HCFC baseline for compliance has been established at a higher level than the estimated baseline of 402.2 ODP tonnes used as a basis for the Agreement. In approving the HPMP the Executive Committee requested the Secretariat, once the baseline data were known, to *inter-alia* update Appendix 2-A ("The Targets, and Funding") to the Agreement with the figures for the maximum allowable consumption, and to notify the Executive Committee of the resulting change in the levels of maximum allowable consumption (decision 64/42(g)). Based on the revised HCFC baseline, the relevant paragraph of the Agreement has been updated, and a new paragraph 16 has been added to indicate that the updated Agreement supersedes that reached at the 64th meeting, as shown in Annex I to this document. The full revised Agreement will be appended to the final report of the 71st meeting.

Conclusion

18. It appears that Indonesia will meet the 2013 HCFC consumption limit of the Montreal Protocol, which is the same as the maximum allowable consumption in the Agreement between the Government and the Executive Committee. With the progress assessment in the investment component, the technical assistance activities and the activities undertaken by the PMU, the Secretariat arrived at the conclusion that the country has achieved a significant level of implementation of activities initiated during the first tranche of stage I of the HPMP. In addition, Indonesia appears to be well advanced on its progress to meeting the 2015 compliance requirements.

RECOMMENDATION

- 19. The Executive Committee may wish to consider:
 - (a) Taking note of the progress report on the implementation of the first tranche of stage I of the HCFC phase-out management plan (HPMP) in Indonesia;
 - (b) Noting that the Fund Secretariat had updated paragraph 1, Appendices 1-A and 2-A of the Agreement between the Government of Indonesia and the Executive Committee, based on the established HCFC baseline for compliance, and that a new paragraph 16 had been added to indicate that the updated Agreement superseded that reached at the 64th meeting, as contained in Annex I to the present document;
 - (c) Further noting that the revised starting point for sustained aggregate reduction in HCFC consumption was 403.9 ODP tonnes, calculated using actual consumption of 374.8 ODP tonnes and 433.0 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol; and
 - (d) Approving the second tranche of stage I of the HPMP for Indonesia, and the corresponding 2014-2015 tranche implementation plan, at the amount of US \$5,313,475 consisting of US \$4,000,000 plus agency support costs of US \$300,000 for UNDP; and US \$942,767 plus agency support costs of US \$70,708 for the World Bank.

Annex I

AGREEMENT BETWEEN THE GOVERNMENT OF INDONESIA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS

- 1. This Agreement represents the understanding between the Government of Indonesia (the "Country") and the Executive Committee with respect to the reduction of controlled use of the ozone depleting substances (ODS) set out in Appendix 1-A ("The Substances") to a sustained level of **323.1** ODP tonnes prior to 1 January 2018 in compliance with Montreal Protocol schedules.
- 16. This updated Agreement supersedes the Agreement reached between the Government of Indonesia and the Executive Committee at the 64th meeting of the Executive Committee.

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	С	I	267.4
HCFC-141b	С	I	132.6
HCFC-123 and HCFC-225	С	I	3.9
Total			403.9

APPENDIX 2-A: THE TARGETS, AND FUNDING

		2011	2012	2013	2014	2015	2016	2017	2018	Total
1.1	Montreal Protocol reduction	n/a	n/a	403.9	403.9	363.51	363.51	363.51	363.51	n/a
	schedule of Annex C, Group I									
	substances (ODP tonnes)									
1.2	Maximum allowable total	n/a	n/a	403.9	403.9	363.51	363.51	363.51	323.12	n/a
	consumption of Annex C, Group I									
	substances (ODP tonnes)									
2.1	Lead IA (UNDP) agreed funding (US \$)	4,000,000	0	,,.	0	456,102	0	0	445,000	8,901,102
2.2	Support costs for Lead IA (US \$)	300,000	0	300,000	0	34,208	0	0	33,375	667,583
2.3	Cooperating IA (Australia) agreed funding (US \$)	300,000	0	0	0	0	0	0	0	300,000
2.4	Support costs for Cooperating IA (US \$)	39,000	0	0	0	0	0	0	0	39,000
2.5	Cooperating IA (World Bank) agreed funding (US \$)	1,500,000	0	942,767	0	135,710	0	0	135,710	2,714,187
2.6	Support costs for Cooperating IA (US \$)	112,500	0	70,708	0	10,178	0	0	10,178	203,564
2.7	Cooperating IA (UNIDO) agreed funding (US \$)	777,395	0	0	0	0	0	0	0	777,395
2.8	Support costs for Cooperating IA (US \$)	58,305	0	0	0	0	0	0	0	58,305
3.1	Total agreed funding (US \$)	6,577,395	0	4,942,767	0	591,812	0	0	580,710	12,692,684
3.2	Total support cost (US \$)	509,805	0	370,708	0	44,386	0	0	43,553	968,452
3.3	Total agreed costs (US \$)	7,087,200	0	5,313,475	0	636,198	0	0	624,263	13,661,136
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)									45.1
4.1.2										0
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)									222.3
4.2.1										89.9
										0
										42.7
										0
										0
4.3.3	4.3.3 Remaining eligible consumption for HCFC-123 and HCFC-225 (ODP tonnes)									3.9