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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Seventy-sixth Meeting
Montreal, 9-13 May 2016

PROJECT PROPOSALS: INDONESIA

This document consists of the comments and recommendations of the Secretariat on the following project proposals:

Phase-out

•	HCFC phase-out management plan (stage I, third tranche)	UNDP, UNIDO, World Bank and Australia
•	HCFC phase-out management plan (stage II, first tranche)	UNDP and World Bank

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Indonesia

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage I)	UNDP (lead), Australia, World Bank, UNIDO	64th	20% by 2018

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2014	257.98 (ODP tonnes)

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2014
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22				27.5	134.4				161.9
HCFC-123			1.0		1.1				2.2
HCFC-141b		60.3		32.5					92.7
HCFC-142b					0.3				0.3
HCFC-225						0.9			0.9

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	403.9	Starting point for sustained aggregate reductions:	403.9
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	135.0	Remaining:	268.92

(V) BUSINESS PLAN		2015	2016	2017	2018	Total
UNDP	ODS phase-out (ODP tonnes)	4.9	0.0	0.0	4.7	9.6
	Funding (US $)	490,310	0	0	478,375	968,685
World Bank	ODS phase-out (ODP tonnes)	1.4			1.4	2.9
	Funding (US $)	145,888			145,888	291,776

(VI) PROJECT DATA			2011	2012	2013	2014	2015	2016	2017	2018	Total
Montreal Protocol consumption limits			n/a	n/a	403.9	403.9	363.5	363.5	363.5	363.5	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	403.9	403.9	363.5	363.5	363.5	323.1	n/a
Agreed funding (US $)	Australia	Project costs	300,000	0	0	0	0	0	0	0	300,000
		Support costs	39,000	0	0	0	0	0	0	0	39,000
	World Bank	Project costs	1,500,000	0	942,767	0	135,710	0	0	135,710	2,714,187
		Support costs	112,500	0	70,708	0	10,178	0	0	10,178	203,564
	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
Funds approved by ExCom (US $)		Project costs	6,577,395	0	4,942,767						11,520,162
		Support costs	509,805	0	370,708						880,513
Total funds requested for approval at this meeting (US $)		Project costs						591,812*			591,812
		Support costs						44,386*			44,386

*Third tranche submitted to the 75th meeting but withdrawn during the meeting.

Secretariat's recommendation:	For individual consideration

PROJECT DESCRIPTION

Background

1. On behalf of the Government of Indonesia, UNDP as the lead implementing agency, submitted to the 75th meeting a request for funding for the third tranche of stage I of the HCFC phase-out management plan (HPMP), at a total cost of US $636,198, including agency support costs

2. During the discussion, the Secretariat informed the Executive Committee that several refrigeration and air-conditioning (RAC) enterprises had decided to convert to high-global warming potential (GWP) refrigerants without funding from the Fund, resulting in US $3.2 million in savings. The Government was proposing to use US $3,050,000 for activities in the servicing sector. Also, several enterprises in the foam sector were concerned about the proposed conversion to the alternative blowing agent, and thus the Government was proposing to redirect approximately US $200,000 to purchase equipment to customize HFC-245fa formulations and research the use of water-blown formulations by one or two systems houses.

3. To assist the Executive Committee in assessing the above-mentioned issues, the Secretariat provided the following two options:

(a) Return to the Fund the savings associated with the RAC enterprises that decided to withdraw from the project, and the incremental costs associated with the foam enterprises that had not yet committed to converting to the agreed technology, noting that the Government of Indonesia could submit a proposal for stage II of the HPMP as early as the 76th meeting; or

(b) Approve the reallocations of funding as proposed by the Government of Indonesia.

4. After further consultations, UNDP reported that the Government of Indonesia had decided to withdraw its request for funding for the third tranche of the HPMP.

5. On behalf of the Government of Indonesia, UNDP as the lead implementing agency, has submitted to the 76th meeting a request for funding for the third tranche of stage I of the HCFC phase-out management plan (HPMP), at a total cost of US $636,198, consisting of US $456,102, plus agency support costs of US $34,208 for UNDP, and US $135,710, plus agency support costs of US $10,178 for the World Bank. 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 2016 to 2018.

Report on HCFC consumption

HCFC consumption

6. The Government of Indonesia reported a consumption of 257.98 ODP tonnes of HCFC in 2014 and estimated a consumption of 152.67 ODP tonnes for 2015. The 2011-2015 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Indonesia (2011-2014 Article 7 data, 2015 verified)

HCFC	2011	2012	2013	2014	2015*	Baseline
Metric tonnes						
HCFC-22	3,909.6	3,662.4	2,977.1	2,944.2	1,892.90	4,861.9
HCFC-123	311.7	190.9	100.5	108.8	101.9	192.2
HCFC-124	0	0	0	0	0	0.1
HCFC-141b	1,009.9	1,096.4	1,300.0	843.0	420	1,205.9
HCFC-142b	64.1	24.9	6.4	4.5	0	0
HCFC-225	14.0	27.3	19.4	12.2	4.6	0.3

HCFC	2011	2012	2013	2014	2015*	Baseline
Total (metric tonnes)	**5,309.3**	**5,001.9**	**4,403.4**	**3,912.7**	**2,419.35**	**6,260.4**
ODP tonnes						
HCFC-22	215.0	201.4	163.7	161.9	104.1	267.4
HCFC-123	6.2	3.8	2.0	2.2	2.0	3.8
HCFC-124	0.0	0.0	0.0	0.0	0.0	0.0
HCFC-141b	111.1	120.6	143.0	92.7	46.2	132.6
HCFC-142b	4.2	1.6	0.4	0.3	0	0.0
HCFC-225	1.0	1.9	1.4	0.9	0.3	0.0
Total (ODP tonnes)	**337.50**	**329.38**	**310.52**	**257.98**	**152.67**	**403.9**

*Not reported yet but verified.

7. As a result of the implementation of HCFC licensing and quota system and conversion projects, the consumption of all HCFCs used in the country has decreased in 2015. The (verified) 2015 consumption of 152.67 ODP tonnes of HCFCs was 58 per cent below the 2015 allowable consumption and 62 per cent below Indonesia's baseline of 403.9 ODP tonnes.

Verification report

8. The verification report confirmed that the Government has an enforceable licensing and quota system for HCFC imports and that the total consumption of HCFCs was 310.5 ODP tonnes in 2013, 258 ODP tonnes in 2014, and 152.67 ODP tonnes in 2015. The verification concluded that Indonesia has met the Montreal Protocol targets for the relevant years.

Country programme (CP) implementation report

9. The Government of Indonesia reported HCFC sector consumption data under the 2014 CP implementation report which is consistent with the data reported under Article 7. The 2015 CP report is expected to be submitted by 1 May 2016.

Progress report on the implementation of the second tranche of the HPMP

Legal framework

10. The licensing and quota system for HCFC imports was established in 2012 and further updated in October of 2015. The Government has issued HCFC import quotas for 2015 and 2016 at 269.4 ODP tonnes. The Government has prohibited the use of HCFC-22 and HCFC-141b in RAC manufacturing and assembly sectors from 1 January 2015; and has removed HFC-32 from the list of highly flammable substances and is developing standards for its safe use in RAC equipment. The enterprises manufacturing HFC-32-based products have their own safety standards in installing and servicing the equipment. Currently, there is no regulation restricting the import of products/substances with high GWP.

Foam manufacturing sector

11. Twenty-six polyurethane rigid foam manufacturing enterprises were included under stage I of the HPMP for conversion to non-HCFC-141b technologies with the assistance of the World Bank. Three large enterprises manufacturing refrigeration equipment completed the conversion of the insulation foam process to cyclopentane technology with the phase-out of 149.6 metric tonnes (mt) (16.46 ODP tonnes) of HCFC-141b. The remaining 23 are small and medium-sized enterprises (SMEs), of which five have completed the conversion to HFC-245fa technology resulting in the phase-out of 45.10 mt (4.96 ODP tonnes) of HCFC-141b. Three SMEs (with a consumption of 12.85 mt (1.41 ODP tonnes) of HCFC-141b) out of the remaining 18 enterprises have signed or imminently will sign agreements to convert to HFC-245fa, whereas the rest are concerned about the availability and price of non-HCFC-141b foam

blowing agents and raw materials that will allow them to make the same quality foam products that their clients are used to.

12. In addition, four foam enterprises manufacturing rigid polyurethane foam have converted to hydrocarbon-based technology with the support of UNIDO, phasing-out 94.5 mt (10.40 ODP tonnes) of HCFC-141b.

Refrigeration and air-conditioning manufacturing sector

13. In the air-conditioning manufacturing sector, out of 21 enterprises, five enterprises completed their conversion to HFC-32, with a total phase-out of 353.46 mt (19.44 ODP tonnes) of HCFC-22. In the commercial refrigeration sector, out of 27 enterprises, 15 enterprises had stopped using HCFCs and are expected to finalize their conversion to HFC-32 to replace 127.1 mt (6.99 ODP tonnes) of HCFC-22 refrigerant and cyclopentane to replace 413 mt (45.43 ODP tonnes) of HCFC-141b as a foam blowing agent by mid-2016.

14. The remaining 12 enterprises in the refrigeration sector (with a total consumption of 38 mt (2.09 ODP tonnes)) and 16 enterprises in the air-conditioning sector (with a total consumption of 233.27 mt (12.83 ODP tonnes)) requested to be removed from the HPMP as they decided to convert to high-GWP refrigerants without funding from the Multilateral Fund. The total funding of US $3,134,216 was allocated to those 28 enterprises.

15. In support to the conversion of the refrigeration and air-conditioning manufacturing enterprises, the Ministry of Environment and Forestry facilitated a number of awareness activities on HCFC alternatives and their availability, provided technical assistance and an outreach event for the media.

Refrigeration servicing sector

16. The phase-out activity to address HCFC consumption in the servicing sector was limited to the establishment of a product stewardship programme for management of refrigerants, reclaim equipment supply for demonstration purposes and an awareness programme (as a bilateral cooperation by the Government of Australia). As of September 2015, manuals on good service practices and on use of flammable refrigerants in refrigeration and air-conditioning (RAC) equipment had been translated, and consultations with the Management Refrigeration Association of Indonesia (AMRI) on phase-out related matters in the RAC sector had been carried out.

Level of fund disbursement

17. As of March 2016, of the US $11,520,162 so far approved, US $6,612,305 had been disbursed (US $4,244,978 for UNDP, US $769,445 for UNIDO, US $1,552,882 for the World Bank and US $45,000 for the Government of Australia). Table 2 shows the financial report of stage I.

Table 2. Financial report of stage I of the HPMP for Indonesia (US $)

Agency	First tranche		Second tranche		Total approved	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNDP	4,000,000	2,325,303	4,000,000	1,919,675	8,000,000	4,244,978
UNIDO	777,395	769,445	0	0	777,395	769,445
World Bank	1,500,000	982,000	942,767	570,882	2,442,767	1,552,882
Government of Australia	300,000	45,000	0	0	300,000	45,000
Total	**6,577,395**	**4,121,748**	**4,942,767**	**2,490,557**	**11,520,162**	**6,612,305**
Disbursement rate (%)	**63**		**50**		**57**	

Implementation plan for the third tranche of the HPMP

18. The third funding tranche of the HPMP will be implemented between 2016 and 2018. During this period, the Government will continue conversion activities in the refrigeration and air-conditioning sector (US $456,102 for UNDP), and in the foam sector (US $135,710 for the World Bank), and will finalize implementation modalities of the product stewardship programme, upgrade training curriculum and conduct awareness activities (funding remaining from the first tranche). The project management unit will continue to support HPMP implementation and consultations with industry will be also held.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Proposals on funds reallocation

Foam manufacturing sector

19. With regard to the concern of several foam enterprises about the availability and price of HFC-245fa formulations, the World Bank clarified that pre-blended HFC-245fa polyol is no longer available in Indonesia. Instead, the systems house that was providing such systems is now only making bulk HFC-245fa available, requiring downstream users to purchase a pre-mixing unit. The remaining 15 SMEs are concerned about the availability and cost of a conversion to HFC-245fa and have therefore decided not to convert to this alternative.

20. In response to this situation, the Government of Indonesia and the World Bank proposed to redirect up to 30 per cent of the total funding associated with the foam sector to support two domestic systems houses to develop low-GWP foam blowing agents (i.e., pre-blended hydrocarbon polyols, water-blown foam, and pre-blended HFOs) and engage directly with SMEs foam producers to address their quality and cost concerns (an additional two domestic systems houses would be supported under stage II).

21. The Secretariat considered the proposed reallocation a major change since stage I did not address systems houses, and would lead to a change in technology for the remaining enterprises under stage I that have not yet signed agreements to convert to HFC-245fa. In light of stage II of the HPMP for Indonesia submitted to the 76th meeting that proposes the complete phase-out of HCFC-141b in the foam sector through conversions to low-GWP alternatives, the Secretariat supports this major change on the understanding that funding for the remaining 15 enterprises under stage I that have not yet signed agreements to convert to HFC-245fa would only be provided if those enterprises converted to low-GWP alternatives.

22. On that basis, the assistance to the systems houses was discussed. The World Bank clarified that of six systems houses, four are locally-owned, one was non-Article 5-owned and one declined to provide information. The two system houses, PT. Sutindo Chemical Indonesia and PT. TSG Chemical, are proposed to be addressed in stage I given their preparedness to convert, while the other two, MCNS Polyurethane Indonesia PT and Bina Artha PT, would be included in stage II of the HPMP. It was further clarified that the four systems houses will develop water-blown, pre-blended HFO formulations, and pre-blended cyclopentane to meet the market demand.

23. The Secretariat and the World Bank discussed the cost of the pre-mixers, foaming machines, and technical assistance, trials and testing for the systems houses, resulting in an agreed cost of US $301,538 per systems house.

24. The Secretariat also noted that the Government wished to use the flexibility clause under the Agreement to change the allocation as originally agreed and per the original implementation plan. The agreed investment costs for the conversions in the rigid foam and integral skin sub-sectors under stage I is US $2,514,187 and the allocation for technical assistance is US $200,000. The Government wishes to allocate US $2,453,000 for the conversions, US $133,200 for technical assistance activities, and US $127,987 for the project management unit. The Secretariat supports this reallocation, as it will facilitate the conversion of the foam enterprises.

Reallocation of funding to the refrigeration servicing sector

25. The funding associated with the 28 RAC enterprises that decided to convert with their own resources to HFC-410A technology (rather than HFC-32 originally proposed) is US $3,134,216. The Government of Indonesia had proposed to return those funds to the Multilateral Fund, and submit stage II of the HPMP where the refrigeration servicing sector will be addressed. The Secretariat supports this proposal.

26. UNDP also clarified that in 2014 and 2015 the activities under the Government of Australia component of the HPMP could not progress significantly as the focus of the PMU and NOU was on implementing HCFC phase-out in RAC manufacturing as per the HPMP and implementation of regulations. During 2016 and 2017, priority would be given to the implementation of activities under the Australia component with support from relevant technical experts.

Changes to the Agreement

27. In light of the proposed assistance to the two systems houses and the return of funds associated with the RAC enterprises that decided to convert to high-GWP alternatives with their own resources, the Secretariat proposed to revise the Agreement between the Government of Indonesia and the Executive Committee to combine the third and fourth tranches, originally proposed in 2015 and 2018 respectively, and thus minimizing the overlap between stage I and II of the HPMP. In addition, this approach would allow the assistance to the two systems houses to be provided as early as possible, thus facilitating the introduction of low-GWP alternatives in the foam sector.

28. To reflect that the third and fourth tranches were combined to become the final tranche for the stage I of the HPMP for Indonesia, paragraph 17 and Appendix 2-A of the updated Agreement between the Government of Indonesia and the Executive Committee reached at the 71st meeting have been further updated, as shown in Annex I to the present document. The full revised Agreement will be appended to the final report of the 76th meeting.

Conclusion

29. Indonesia continues to make progress in phasing out HCFCs. The HCFC consumption is already 62 per cent below the baseline, and the verification report confirmed that the country has put in place an operational licensing and quota system for HCFC imports. Fifty per cent of the second tranche and 57 per cent of the funding approved to date has been disbursed. The Secretariat considers the proposal to redirect funding to two systems houses will facilitate the introduction of low-GWP alternatives in the foam sector, and that the return of funds associated with the RAC manufacturing enterprises that decided to convert to HFC-410A technology with their own resources will facilitate the activities in the servicing sector proposed under stage II of the HPMP.

RECOMMENDATION

30. The Executive Committee may wish to consider:

(a) Noting:

(i) The progress report on the implementation of the second tranche of stage I of the HCFC phase-out management plan (HPMP) in Indonesia;

(ii) That 12 enterprises in the refrigeration sector and 16 enterprises in the air-conditioning sector requested to be removed from stage I of the HPMP as they had decided to convert to high-global warming potential (GWP) technology without funding from the Multilateral Fund; and that UNDP would return US $3,134,216, plus agency support costs of US $235,066 associated with these enterprises to the 76th meeting;

(iii) That 15 foam enterprises decided not to convert to HFC-245fa technology under stage I of the HPMP and that further funding would only be provided to convert to low-GWP alternatives;

(b) Approving the reallocation of up to US $603,077 to support two local systems houses to develop low-GWP formulations as contained in the 2016-2018 tranche implementation plan;

(c) Further noting that the Fund Secretariat had updated Appendix 2-A of the Agreement between the Government of Indonesia and the Executive Committee, based on the combination of the third (US $591,812 in 2015) and fourth (US $580,710 in 2018) tranches, and that paragraph 17 had been updated to indicate that the Agreement superseded that reached at the 71st meeting, as contained in Annex I to the present document;

(d) Requesting the Government of Indonesia, UNDP, UNIDO, World Bank and the Government of Australia to submit progress reports on a yearly basis on the implementation of the work programme associated with the final tranche until the completion of the project, verification reports until approval of stage II, and the project completion report to the first meeting of the Executive Committee in 2019; and

(e) Approving the third and final tranche of stage I of the HPMP for Indonesia, and the corresponding 2016-2018 tranche implementation plan, in the amount of US $1,260,461, consisting of US $901,102, plus agency support costs of US $67,583 for UNDP, and US $271,420, plus agency support costs of US $20,536 for the World Bank.

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Indonesia

(I) PROJECT TITLE	AGENCY
HCFC phase out plan (Stage II)	UNDP (lead) and World Bank

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2014	257.98 (ODP tonnes)

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2014
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22				27.5	134.4				161.9
HCFC-123			1.0		1.1				2.2
HCFC-141b		60.3		32.5					92.7
HCFC-142b					0.3				0.3
HCFC-225						0.9			0.9

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	403.9	Starting point for sustained aggregate reductions:	403.9
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	135.0	Remaining:	268.92

(V) BUSINESS PLAN		2016	2017	2018	2019	2020	After 2020	Total
UNDP	ODS phase-out (ODP tonnes)	0	39.6	29.7	29.7	0	0	99.0
	Funding (US $)	0	3,698,000	2,773,000	2,773,000	0	0	9,244,000
World Bank	ODS phase-out (ODP tonnes)	10.7	10.7	10.7	10.7	0	0	42.8
	Funding (US $)	727,000	727,000	727,000	727,000	0	0	2,908,000

(VI) PROJECT DATA			2016	2017	2018	2019	2020	2021-2023	Total
Montreal Protocol consumption limits									n/a
Maximum allowable consumption (ODP tonnes)									n/a
Project costs requested in principle (US $)	UNDP	Project costs							TBD
		Support costs							TBD
	World Bank	Project costs							TBD
		Support costs							TBD
Total project costs requested in principle (US $)									TBD
Total support costs requested in principle (US $)									TBD
Total funds requested in principle (US $)									TBD

(VII) Request for funding for the first tranche (2016)		
Agency	**Funds requested (US $)**	**Support costs (US $)**
UNDP	TBD	TBD
World Bank	TBD	TBD

Funding request:	Approval of funding for the first tranche (2016) as indicated above
Secretariat's recommendation:	For individual consideration

PROJECT DESCRIPTION

31. On behalf of the Government of Indonesia, UNDP, as the lead implementing agency, has submitted to the 76th meeting stage II of the HCFC phase-out management plan (HPMP) at a total cost of US $12,837,591, consisting of US $7,457,000, plus agency support costs of US $521,990 for UNDP, and US $4,540,749, plus agency support costs of US $317,852 for the World Bank, as originally submitted. The implementation of stage II of the HPMP will phase out 111.92 ODP tonnes of HCFCs and result in 50 per cent reduction of HCFC consumption from the baseline by 2023.

Status of stage I

32. Stage I of the HPMP for Indonesia was approved at the 64th meeting to meet 20 per cent reduction from the baseline by 2018 at a total cost of US $12,692,684, to phase out 135 ODP tonnes.

Progress in implementation of stage I activities

33. The progress in implementation of stage I activities, including a report on the ODS policy and regulation framework, programme management unit and status of disbursement, is explained in paragraphs 10 to 17 of the present document. Table 1 summarizes the conversion activities in stage I. In addition, 3.7 ODP tonnes were phased out through technical assistance for refrigerant management implemented by the Government of Australia.

Table 1. Summary of the conversion activities in stage I by sector

Sector	Agency	Substance	Enterprises assisted by MLF in stage I		All enterprises in stage I	
			Number	Phase out (ODP tonnes)	Number	Phase out (ODP tonnes)
Foam sector	World Bank	HCFC-141b	8*	21.42	26	34.12
	UNIDO	HCFC-141b	4	10.35	4	10.35
Air-conditioning (AC)	UNDP	HCFC-22	5	19.44	21**	32.27
Commercial refrigeration	UNDP	HCFC-22	15	6.99	27**	9.08
		HCFC-141b		45.43		45.43
Total			32	103.63	78	131.25

*Three other enterprises in addition to eight have signed or imminently will sign agreements to convert to HFC-245fa, whereas the remaining 15 enterprises are concerned about the availability and price of non-HCFC-141b foam blowing agents and raw materials. Those enterprises would either convert to low-GWP alternatives in light of the assistance to be provided to two systems houses under stage I, or convert to HFC-245fa without assistance from the Multilateral Fund.

** Remaining 16 enterprises in the AC and 12 in the commercial refrigeration sector requested to be removed from the HPMP as they decided to convert to high-GWP alternative technologies without funding from the Multilateral Fund.

Stage II of the HPMP

34. After implementation of stage I of the HPMP, the total remaining consumption of HCFCs eligible for funding in Indonesia is 268.9 ODP tonnes. The Government is committing in stage II to reduce HCFC consumption by 35 and 50 per cent of the baseline by 2020 and 2023, respectively, resulting in the phase out 111.92 ODP tonnes (of which 94.38 ODP tonnes are eligible for funding). Therefore, the remaining HCFC consumption eligible for funding in future stages would be 174.57 ODP tonnes as shown in Table 2.

Table 2. Overview of the remaining HCFC consumption in Indonesia (ODP tonnes)

Substance	HCFC-22	HCFC-141b	HCFC-123	HCFC-225	Total
Starting point	267.40	132.60	3.90	0.02	403.90
Reduction in stage I	45.10	89.90	0.00	0.00	135.00
Remaining consumption after stage I	222.30	42.70	3.90	0.02	268.90

Substance	HCFC-22	HCFC-141b	HCFC-123	HCFC-225	Total
Reduction proposed in stage II	50.61	60.27*	1.04	0	111.92
Remaining consumption for future stages	171.69	0	2.86	0.02	174.57

* Including 17.57 ODP tonnes of HCFC-141b to be phased out without assistance from the Multilateral Fund.

HCFC consumption and sector distribution

35. The 2014 consumption as reported under Article 7 of the Montreal Protocol was 258 ODP tonnes. The verification report indicated consumption of 152.7 ODP tonnes of HCFCs in 2015. The 2012-2015 HCFC consumption is shown in Table 3.

Table 3. HCFC consumption in Indonesia (2012-2014 Article 7 data and 2015 verified consumption)

HCFC	2012	2013	2014	2015*	Baseline
Metric tonnes					
HCFC-22	3,662.4	2,977.1	2,944.2	1,892.9	4,861.9
HCFC-123	190.9	100.5	108.8	101.9	192.2
HCFC-141b	1,096.4	1,300.0	843.0	420.0	1,205.9
HCFC-142b	24.9	6.4	4.5	0	0
HCFC-225	27.3	19.4	12.2	4.6	0.3
Total (metric tonnes)	**5,001.9**	**4,403.3**	**3,912.7**	**2,419.4**	**6,260.3**
ODP tonnes					
HCFC-22	201.4	163.7	161.9	104.1	267.4
HCFC-123	3.8	2.0	2.2	2.0	3.9
HCFC-141b	120.6	143.0	92.7	46.2	132.6
HCFC-142b	1.6	0.4	0.3	0	0
HCFC-225	1.9	1.4	0.9	0.3	0.02
Total (ODP tonnes)	**329.4**	**310.5**	**258**	**152.7**	**403.9**

* As indicted in the verification report for 2015

36. The total HCFC consumption in 2015 was 62 per cent below Indonesia's baseline and 58 and 53 per cent below the consumption limits established in the Agreement between the Government of Indonesia and the Executive Committee for 2015 (363.51 ODP tonnes) and 2018 (323.12 ODP tonnes), respectively. The decrease in HCFC consumption is a result of the combination of phase-out activities implemented under stage I of the HPMP and lower levels of imports.

37. Table 4 presents the consumption of HCFCs by sector as reported in the country programme (CP) data for 2014.

Table 4. Distribution of HCFCs by sector and substance in Indonesia (2014)

HCFC	Foam	Fire fighting	Ref. manufacturing	Ref. servicing	Solvent	Total
Metric tonnes						
HCFC-22			500.5	2,443.7		2,944.2
HCFC-123		52.2		56.6		108.8
HCFC-141b	548.0		295.1			843.1
HCFC-142b				4.5		4.5
HCFC-225					12.2	12.2
Total (mt)	**548.0**	**52.2**	**795.6**	**2,504.8**	**12.2**	**3,912.8**
ODP tonnes						
HCFC-22			27.5	134.4		161.9
HCFC-123		1.0		1.1		2.1
HCFC-141b	60.3		32.5			92.8
HCFC-142b				0.3		0.3
HCFC-225					0.9	0.9
Total (ODP tonnes)	**60.3**	**1.0**	**60.0**	**135.8**	**0.9**	**258**

38. The largest consumption of HCFCs in ODP tonnes was in the refrigeration servicing sector (53 per cent) followed by the foam and the refrigeration and air-conditioning (RAC) manufacturing sectors (23 per cent). The ban on the production and import of HCFC-based equipment in the RAC sector from 1 January 2015 resulted in the complete phase-out of HCFCs used for manufacturing RAC equipment in 2015.

HCFC consumption in manufacturing sectors

PU foam manufacturing

39. The consumption of HCFC-141b for foam production was 843 mt (92.73 ODP tonnes) in 2014, of which 548 mt (60.27 ODP tonnes) were consumed by enterprises to be addressed in stage II in the following applications: thermoware; sandwich panels (continuous and discontinuous); block foam; foam insulation for pipes, tanks and water heaters; fishing boats; imitation wood (roof boards) and spray foam. The majority of enterprises to be addressed in stage II have consumption below 7 mt. There is also an unknown consumption of HCFC-141b contained in imported pre-blended polyols that will be phased out in stage II.

Fire fighting

40. The consumption of HCFC-123 in the firefighting sector has decreased from 152 mt (3.04 ODP tonnes) in 2009 to 52.23 mt (1.04 ODP tonnes) in 2014. Of six enterprises in the firefighting sector one is locally owned (PT. Hartindo), one is non-Article 5 owned (PT. Indolok) and the remaining enterprises are distributors of equipment.

HCFC consumption in the refrigeration servicing sector

41. In 2014, the refrigeration servicing sector accounted for 83 per cent of HCFC-22 consumption. The 2009-2010 average HCFC-22 servicing sector consumption was 4,027 mt; consumption in the sector had decreased to 2,444 mt by 2014, and is expected to decrease further with the retirement of equipment; however, the consumption of HCFC-123 may grow due to the demand for servicing existing and new equipment.

Proposed activities in stage II of the HPMP

42. The main activities to be implemented during stage II include regulatory actions, conversion of the PU foam manufacturing sector, assistance to the fire-fighting and refrigeration servicing sectors and implementation and monitoring.

Regulatory actions

43. The regulatory component will support the conversion of the PU foam enterprises and reductions in the refrigeration servicing sector. It will include a ban on the use of HCFC-141b in bulk and contained in imported pre-blended polyols by 1 January 2021; revision and development of safety regulations and guidelines on flammable blowing agents; development and revision of standards in the refrigeration servicing sector (including on safety, training and certification); mandatory certification of technicians servicing equipment with flammable refrigerants; and regulations that aim to reduce dependency on high-GWP refrigerants in the refrigeration and air-conditioning sectors by the Government of Indonesia by 2019.

Activities in the manufacturing sectors

PU foam manufacturing sector

44. Stage II includes the complete phase-out of the consumption of 60.27 ODP tonnes of HCFC-141b in the PU foam manufacturing sector by the end of 2020 (only 42.73 ODP tonnes are eligible for funding) through:

(a) Conversion of four large (consumption above 20 mt) and eight medium (consumption between 7 and 20 mt) enterprises to hydrocarbon (HC) blowing agent, with the former blending in-house and the latter purchasing pre-blended HC;

(b) Assistance to two systems houses to develop pre-blended HC and HFOs and CO_2/water formulations (this is in addition to allocation of funds to support two systems houses, proposed under stage I);

(c) Group project for conversion of small enterprises that will be provided vouchers to purchase low-GWP blowing agents at a reduced price from systems houses (vouchers will be exchanged for funds from the Multilateral Fund); and

(d) Technical assistance activities, including workshops for enterprises and systems houses; training for local authorities to support foam enterprises and capacity-building of customs officials to ensure effective import control of HCFC-141b; a study on the use and import of pre-blended polyols; a study on a safe use of flammable alternative foam blowing technologies to support development and/or revision of national safety standards and guidelines; and technical consulting services to the enterprises.

45. Stage II will give preference to low-GWP blowing agents and consider HFC-245fa only if necessary as a transitional blowing agent that will be phased out to low-GWP alternatives, once available, at no additional cost to the Multilateral Fund.

46. The cost of the conversion of medium and large enterprises was based on the standard costs for replacing or retrofitting equipment in the baseline, installing new equipment, safety measures and trials, trainings and technical support, as shown in Table 5.

Table 5. The proposed standard cost for conversion to HC

Item	Cost (US $)	
	In-house mixing of cyclopentane for large enterprises	**Pre-blended cyclopentane for medium enterprises**
Storage for pre-blended HC	-	10,000
HC storage tank	50,000	-
Premixing unit	120,000	-
Foaming dispenser (120 kg/min)	140,000	50,000
Safety measures	80,000	80,000
Trials	10,000	10,000
Trainings and technical support	10,000	10,000
Total	**410,000**	**160,000**

47. The funds requested from the Multilateral Fund for the conversation of large and medium enterprises were adjusted based on the cost effectiveness (CE) threshold established by decision 74/50[1] as shown in Table 6.

[1] UNEP/OzL.Pro/ExCom/74/56

Table 6. Cost of conversion of medium and large enterprise

Enterprise	CE threshold (US $/kg)	Consumption in 2014 (mt)	Cost (US $)	Cost based on CE threshold (US $)
4 large enterprises (consumption above 20 mt)				
Cahaya Perdana Plastik, PT.	9.79	32,835	410,000	321,455
Cahaya Merah Delima, PT.		29,315	410,000	286,994
Dasa Windu Agung, PT.		46,610	410,000	456,312
Maspion Plastic and Metal Industry, PT.		39,550	410,000	387,195
Sub-total		**148,310**	**1,640,000**	**1,451,955**
8 medium enterprises (consumption between 7 and 20 mt)				
Ricwil Indonesia, PT.	10.96	11,413	160,000	125,086
Alsun Suksesindo, PT.		7,136	160,000	78,211
Bina Tehnik, PT.		15,700	160,000	172,072
Duta Tehnik, PT.		6,591	160,000	72,237
Tamacool, PT.		5,175	160,000	56,718
Central Mandiri Cemerlang, PT.		12,000	160,000	131,520
Saka Baja, PT.		8,060	160,000	88,338
Willich Isolasi Pratama, PT.		8,416	160,000	92,239
Sub-total		**74,491**	**1,280,000**	**816,421**
Total		**222,801**	**2,920,000**	**2,268,376**

48. The cost of the conversion of small enterprises was calculated based on the CE of US $7.00/kg (i.e., incremental capital costs (ICC) of US $2.00/kg and incremental operating costs (IOC) of US $5.00/kg). The proposed cost of the conversion of systems house of US $350,000 each was based on standard costs of the equipment as shown in Table 7.

Table 7. Cost of conversion of systems houses

Item	Cost (US $)
Storage of blowing agents	40,000
Premixing unit	120,000
Foaming unit	140,000
System development, trial and testing	25,000
Sub-total	325,000
Contingency	25,000
Total	**350,000**

49. The total cost of the conversion of the PU foam sector as submitted is presented in Table 8.

Table 8. Total cost for the conversion of the PU foam sector

Component	Applications	Technology	mt	ODP	Total cost (US $)	Funds requested (US $)
Individual conversion project for 12 enterprises						
4 large enterprises	Cool boxes, water jugs, rice boxes, block foam	HC	148.31	16.31	1,640,000	1,451,955
8 medium enterprises	Pipe and round duct insulation, roofing and wall panels	Pre-blended HC	74.49	8.19	1,280,000	816,421

Component	Applications	Technology	mt	ODP	Total cost (US $)	Funds requested (US $)
Group project for small enterprises						
About 200 enterprises	Various applications	CO_2 (water), pre-blended HFOs, HC or methylal /methyl formate*	165.65	18.22	1,159,578	1,159,578
2 systems houses					700,000	700,000
Policy support, TA and PMU (10 % of investment cost)					412,795	412,795
Grand total			**388.45****	**42.73****	**5,192,373****	**4,540,749**

* The final choice of the alternative blowing agent to be determined by the enterprise

** An additional 159.5 mt (17.55 ODP tonnes) will be phased out without assistance from the Multilateral Fund.

Fire fighting

50. Stage II proposes to phase out 1.04 ODP tonnes of HCFC-123 used for production of firefighting equipment, through a combination of project support and information outreach, at a total cost of US $2,228,500 (of which US $2,000,000 is related to certification cost).

Activities in the refrigeration servicing sector

51. Stage II also proposes to phase out 50.61 ODP tonnes of HCFC-22 used in the refrigeration servicing sector, at total cost of US $4,416,500, through the following activities:

(a) Capacity building, including training of 700 customs officers, 90 trainers and 2,000 service technicians and development of training material (US $914,000);

(b) Equipment procurement for 15 training institutions, that will provide good practices and safety trainings for service technicians; five technical institutions that will focus on development of training tools, monitoring of training activities, training the trainers and recovery and reclamation (R&R) programme, including destruction of unwanted ODS through mini destruction facilities; and 50 large and 200 small workshops (US $3,146,000);

(c) Awareness seminars and workshops including information outreach meetings and workshops, logistics and transportation (US $305,000); and

(d) Development of regulation reducing dependency on high-GWP refrigerants, in consultation with the industry associations and taking into account the availability and cost of refrigerants and key components for equipment, the experience from other Article 5 countries with similar conditions and lessons learned from the implementation of stage I of the HPMP (US $51,500).

Implementation and monitoring activities

52. The Project Management Unit (PMU), established in stage I of the HPMP, will continue the management of HPMP activities under direct supervision of the National Ozone Unit (NOU) within the Climate and Atmosphere Division of the Ministry of Environment and Forestry.

53. According to the financial arrangements for the foam sector plan, the World Bank will sign a Grant Agreement with the Government of Indonesia and disburse funds to the country when performance

indicators, phase-out targets and activities included in the action plans and the Grant Agreement are met. Funds will be then disbursed to beneficiaries based on the terms and conditions established in the sub-grant agreements with beneficiaries.

Total cost of stage II of the HPMP

54. The total cost of stage II of the HPMP for Indonesia to be funded through the Multilateral Fund has been estimated at US $11,997,749, as originally submitted (excluding support costs). The proposed phase-out activities will result in the phase-out of 111.92 ODP tonnes of HCFCs with an overall CE of US $7.89/kg (or US $8.82/kg based only on the consumption eligible for funding from the Multilateral Fund of 94.38 ODP tonnes). Detailed activities and costs, as originally submitted, are shown in Table 9.

Table 9. Summary of proposed activities and cost of stage II of the HPMP for Indonesia

Sector	Agency	Substance	mt	ODP tonnes	Funds requested (US $)	CE
PU foam	World Bank	HCFC-141b	547.95	60.27*	4,540,749	8.29
Fire fighting	UNDP	HCFC-123	52.23	1.04	2,228,500	42.67
Refrigeration servicing		HCFC-22	920.10	50.61	4,416,500	4.80
PMU		All	0.00	0.00	812,000	
Total			1,520.28	111.92	11,997,749	7.89

* Of which only 42.73 ODP tonnes are eligible for funding from the Multilateral Fund

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

55. The Secretariat reviewed stage II of the HPMP for Indonesia in light of stage I, the policies and guidelines of the Multilateral Fund, including the criteria for funding HCFC phase-out in the consumption sector for stage II of HPMPs (decision 74/50), and the 2016-2018 business plan of the Multilateral Fund.

Verification

56. The verification report on HCFC consumption confirmed that Indonesia is implementing a licensing and quota system for imports of HCFCs and that consumption of HCFCs in 2015 was in compliance with the Montreal Protocol and the consumption targets established under stage I of the HPMP.

HCFC consumption and quotas

57. UNDP indicated that the Government of Indonesia has issued HCFC import quotas for 2015 and 2016 at the level of 269.4 ODP tonnes, which is 76 per cent higher than the actual import in 2015 (152.7 ODP tonnes). It is expected that demand for HCFC-22 in servicing of cold storage will increase with the improvement of the economic situation in the country.

58. The Secretariat noted that an unknown amount of pre-blended HCFC-141b is being imported and reminded the World Bank of decision 68/42(c)[2]. The World Bank pointed out the difficulty to track the amounts of HCFC-141b in imported pre-blended polyols due the chemical content not being specified

[2] To encourage relevant Article 5 countries to consider establishing a national system for recording the amounts of HCFC-141b contained in pre-blended polyols imported and/or exported (where applicable) to support the ban on imports of pure HCFC-141b, as well as that contained in pre-blended polyols, to be issued once all the foam enterprises had been converted, and to facilitate monitoring of these enterprises to sustain the phase-out of HCFC-141b.

and indicated that the study on the use and import of pre-blended polyols (mentioned in paragraph 44(d)) is expected to increase the understanding of supply and demand of the product, which is required to design a control and monitoring system.

Overarching strategy for stage II

59. The Secretariat noted with appreciation the comprehensive proposal for stage II of the HPMP submitted by the Government of Indonesia where HCFCs used in the manufacturing sector will be replaced with low-GWP alternatives.

60. While the consumption in the solvent sector is small compared to other sectors, the Secretariat suggested addressing it as a matter of priority given its high emissive rate. Taking into account that the cost-effectiveness of the proposed phase-out activities in the firefighting sector is US $42.67/kg and would result in the reduction of only 1.04 ODP tonnes of HCFC-123, the sector's consumption is decreasing, and low-GWP alternatives do not appear to be available, the Secretariat proposed deferring the phase-out activities in the sector and instead consider limited technical assistance in conjunction with regulatory measures and strengthening servicing practices at a cost of US $30,000, on the understanding that the Government could submit during stage II a proposal addressing the firefighting sector (as well as the solvent sector) if low-GWP and cost-effective alternatives were available.

Proposed activities in stage II

Foam manufacturing sector

61. During the project review, the costs of pre-mixing units, the foaming machines, and contingencies for the four large-sized enterprises were adjusted by US $4,655, resulting in a total cost of US $1,447,300. In addition, the investment cost for Bina Teknik was adjusted to US $160,000 rather than US $172,076 calculated on the basis of the cost-effectiveness threshold. Accordingly, costs for the eight medium-sized enterprises was agreed at US $804,349.

62. Subsequent to the original submission, the World Bank clarified that for the conversions to HC blowing technology, it was also requesting incremental operating costs amounting to US $51,847 based on a two per cent increase in foam density associated with the conversion from HCFC-141b to cyclopentane blowing technologies and, where applicable, the addition of a flame retardant. However, based on the advice received from technical experts, the Secretariat does not consider an increase in foam density incremental when converting from HCFC-141b to cyclopentane, and, therefore, no IOC are incurred. With no increase in density, IOCs would amount to US $203,185 in savings. During the discussions, it was agreed, on an exceptional basis, not to request IOC for the conversion of the foam enterprises.

63. The Secretariat and the World Bank discussed the level of funding for technical assistance (TA), policy support and project management, which was agreed at US $240,858 (instead of US $412,795).

64. The agreed level of funding for the foam sector is summarized in Table 10.

Table 10. Agreed cost of the conversion of the PU foam sector stage II of the HPMP for Indonesia

Components	Agreed cost (US $)
Investment	
Group I (≥ 20 mt): 4 enterprises converting to hydrocarbon	1,447,300
Group II (7-20 mt): 8 enterprises converting to pre-blended hydrocarbon	804,349
Group III: Group projects for small foam producers through systems houses (voucher scheme)	1,159,578
System houses	603,077
Sub-total	**4,014,305**

Components	Agreed cost (US $)
Policy support, TA and project management	240,858
Total cost	**4,255,163**

Refrigeration servicing sector

65. UNDP confirmed that there are no recorded stockpiles of unwanted/contaminated ODS in the country, R&R activities are at the initial stage and it is anticipated that contaminated refrigerant stockpiles will increase with the further implementation of the R&R programme. The Secretariat also sought clarification on the planned interactions, if any, between the technical institutions and the Holcim destruction facility, an existing destruction facility located in West Java[3]. UNDP emphasized that the use of mini destruction facilities at the geographically-dispersed technical institutions would reduce the cost of ODS destruction as transportation costs in Indonesia, an archipelagic country, can be significant.

66. The Secretariat also discussed with UNDP the cost of the awareness activities and development of regulation which was reduced to a total of US $273,000 (instead of US $356,500). On this basis, the total agreed cost for the servicing sector amounts to US $4,333,000 with the associated reduction of 49.65 ODP tonnes of HCFC-22 (US $4.80/kg).

Project implementation and monitoring unit (PMU)

67. The Secretariat and UNDP discussed the role of the PMU for the HPMP versus the project management under the foam sector. The PMU will focus on coordination with stakeholders in the servicing sector; support implementation and supervision of HCFC phase-out activities; preparation, implementation and review of the annual implementation plans; financial management; development and maintenance of the project management information system; facilitating project supervision and performance verification; organizing meetings and workshops to ensure cooperation of stakeholders as well as interagency meetings; supervision and evaluation of conversion projects with assistance from technical experts; and overseeing the submission of verification reports. The cost of the PMU was agreed at US $384,000.

Agreed costs for stage II of the HPMP

68. Based on the results of the discussions between the Secretariat, UNDP and the World Bank, the agreed cost of stage II of the HPMP for Indonesia amounts to US $9,002,163 (excluding agency support costs) to achieve the phase-out of 1,450.62 mt (109.92 ODP tonnes), with an overall cost effectiveness of US $6.21 as shown in Table 11. Of the total amount to be phased out, 1,291.16 mt (92.38 ODP tonnes) will be deducted from the remaining consumption eligible for funding.

Table 11. Agreed costs for stage II of the HPMP for Indonesia

Sector	Agency	HCFC	mt	ODP tonnes	Funds requested (US $)	CE
PU foam	World Bank	HCFC-141b	388.45	42.73	4,255,163	10.95
			159.45*	17.54*	0	
Firefighting (technical assistance)	UNDP	HCFC-123			30,000	
Refrigeration servicing		HCFC-22	902.71	49.65	4,333,000	4.80
Implementation and monitoring (PMU)		All	0	0	384,000	n/a
Total stage II			1,450.62	109.92	9,002,163	6.21

*Indonesia's remaining eligible consumption of HCFC-141b is 42.73 ODP tonnes; therefore, 17.54 ODP tonnes will be phased out without assistance from the Multilateral Fund.

[3] http://www.uneptie.org/ozonaction/information/mmcfiles/4766-e-32DestructionCSIndonesia.pdf

69. Noting that the reductions achieved under stage I and proposed under stage II account for 57 per cent of Indonesia's baseline, that there was no growth since the establishment of the baseline, and that the 2015 consumption was already 62 per cent below the baseline, the Secretariat suggested a reduction commitment higher than 35 per cent of the baseline by 2020 and 50 per cent by 2023. UNDP indicated that the Government of Indonesia is willing to consider 37.5 per cent reduction from the baseline by 2020 and 55 per cent by 2023.

Impact on the climate

70. The conversion of the remaining PU foam manufacturing enterprises in Indonesia would avoid the emission into the atmosphere of approximately 391 thousand tonnes of CO_2 equivalent per year, as shown in Table 12.

Table 12. Impact on the climate PU foam projects

Substance	GWP	Tonnes/year	CO_2-eq (tonnes/year)
Before conversion			
HCFC-141b	725	547.91	397,234
Total before conversion			397,234
After conversion			
Cyclopentane, HFO, water	~20	328.75	6,575
Impact			(390,659)

71. The proposed activities in the servicing sector, which include better containment of refrigerants through training and provision of equipment, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogramme of HCFC-22 not emitted due to better refrigeration practices results in a savings of approximately 1.8 CO_2-equivalent tonnes. Although a calculation of the impact on the climate was not included in stage II of the HPMP, the activities planned by the Government of Indonesia, in particular its efforts to promote low-GWP alternatives, refrigerant recovery and reuse, indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere therefore resulting in benefits on the climate. However, at this time, a more accurate quantitative assessment on the impact on climate cannot be conducted. The impact might be established through an assessment of implementation reports by, *inter alia*, comparing the levels of refrigerants used annually from the commencement of the implementation of stage II of the HPMP, the reported amounts of refrigerants being recovered, recycled, and destroyed, and the number of technicians trained and the HCFC-22 based equipment being retrofitted.

2016-2018 business plan of the Multilateral Fund

72. UNDP and the World Bank are requesting US $9,632,314 including agency support costs for the implementation of stage II of the HPMP (2016-2023). The total funding requested for stage II in the business plans for UNDP and the World Bank is US $12,152,243 including agency support costs. Co-financing will be provided by the foam enterprises and system houses as necessary.

Draft Agreement

73. At the time of finalizing this document, the draft Agreement between the Government and Indonesia and the Executive Committee was being finalized through discussions with UNDP, on behalf of the Government of Indonesia. The outcome of those discussions will be communicated via an addendum to this document prior to the 76th meeting.

RECOMMENDATION

74. The Executive Committee may wish to consider:

(a) Approving, in principle, stage II of the HCFC phase-out management plan (HPMP) for Indonesia for the period from 2016 to 2023 to reduce HCFC consumption by 55 per cent of its baseline, in the amount of US $9,632,314, consisting of US $4,747,000 plus agency support costs of US $332,290 for UNDP; and US $4,255,163, plus agency supports costs of US $297,861 for the World Bank;

(b) Noting that the Government of Indonesia has committed to reducing HCFC consumption by 37.5 per cent by 2020, and 55 per cent by 2023;

(c) Noting the commitment of the Government of Indonesia to issue a ban on imports of HCFC-141b in bulk and contained in imported pre-blended polyols by 1 January 2021, and encouraging the Government to establish a national system for recording the amounts of HCFC-141b contained in pre-blended polyols to support that ban;

(d) Noting that no further funding would be provided from the Multilateral Fund to any systems houses in Indonesia for the phase-out of HCFCs;

(e) Noting that during the implementation of stage II, the Government of Indonesia could submit a proposal that addresses the consumption of HCFCs used in the fire fighting and solvent sectors should cost-effective and low-global warming potential alternatives be available; and

(f) Deducting 92.38 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding.

Annex I

TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE GOVERNMENT OF INDONESIA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS

(Relevant changes are in bold font for ease of reference)

17. This updated Agreement supersedes the Agreement reached between the Government of Indonesia and the Executive Committee at the **71st** meeting of the Executive Committee.

APPENDIX 2-A: THE TARGETS, AND FUNDING

		2011	2012	2013	2014	2015	2016	2017	2018	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a	n/a	403.90	403.90	363.51	363.51	363.51	363.51	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	n/a	403.90	403.90	363.51	363.51	363.51	323.12	n/a
2.1	Lead IA (UNDP) agreed funding (US $)	4,000,000	0	4,000,000	0	**0**	**901,102**	0	**0**	8,901,102
2.2	Support costs for Lead IA (US $)	300,000	0	300,000	0	**0**	**67,583**	0	**0**	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	**0**	**271,420**	0	**0**	2,714,187
2.6	Support costs for Cooperating IA (US $)	112,500	0	70,708	0	**0**	**20,356**	0	**0**	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	**0**	**1,172,522**	0	**0**	12,692,684
3.2	Total support cost (US $)	509,805	0	370,708	0	**0**	**87,939**	0	**0**	968,452
3.3	Total agreed costs (US $)	7,087,200	0	5,313,475	0	**0**	**1,260,461**	0	**0**	13,661,136
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)									45.10
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)									0
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)									222.30
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this Agreement (ODP tonnes)									89.90
4.2.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)									0
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)									42.73
4.3.1	Total phase-out of HCFC-123 agreed to be achieved under this Agreement (ODP tonnes)									0
4.3.2	Phase-out of HCFC-123 to be achieved in previously approved projects (ODP tonnes)									0
4.3.3	Remaining eligible consumption for HCFC-123 (ODP tonnes)									3.85
4.4.1	Total phase-out of HCFC-225 agreed to be achieved under this Agreement (ODP tonnes)									0
4.4.2	Phase-out of HCFC-225 to be achieved in previously approved projects (ODP tonnes)									0
4.4.3	Remaining eligible consumption for HCFC-225 (ODP tonnes)									0.02