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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Fifty-fourth Meeting
Montreal, 7-11 April 2008

Corrigendum

**PRELIMINARY DISCUSSION PAPER PROVIDING ANALYSIS ON ALL RELEVANT
COST CONSIDERATIONS SURROUNDING THE FINANCING OF
HCFC PHASE-OUT (DECISION 53/37 (I))**

Replace Tables II.3 and II.4 **with** the following tables, the changes are in italics:

Table II.3: Summary of annual IOC ranges for various foam applications per metric kilogram of HCFC-141b phased-out (US \$/kg)²⁰

Blowing agent	Rigid foam		Integral skin foam	
	Low	High	Low	High
HFC-245fa	2.50	6.40	2.50	6.40
Methyl formate	(0.30)	(1.90)	(0.30)	(1.90)
Water-based systems	0.85	1.75	3.55	12.78
Pentane	<i>(1.00)</i>	<i>(1.90)</i>	<i>(1.11)</i>	<i>0.34</i>
Cyclopentane	<i>(0.85)</i>	<i>(1.50)</i>		

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Table II.4: Total IOC calculated over two years at the enterprise level (US \$)

Technology	Enterprise consumption (tonnes)					
	5.0 metric (0.6 ODP)		25.0 metric (2.8 ODP)		75.0 metric (8.3 ODP)	
	Low	High	Low	High	Low	High
HFC-245fa (50%)	21,750	33,060	108,750	165,300	326,250	495,900
HFC-245fa (75%)	47,850	55,680	239,250	278,400	717,750	835,200
Water-based system	7,395	15,225	36,975	76,125	110,925	228,375
Methyl formate	(2,610)	(16,530)	(13,050)	(82,650)	(39,150)	(247,950)
Pentane	<i>(8,700)</i>	<i>(16,530)</i>	<i>(43,500)</i>	<i>(82,650)</i>	<i>(130,500)</i>	<i>(247,950)</i>
Cyclopentane	<i>(7,395)</i>	<i>(13,050)</i>	<i>(36,975)</i>	<i>(65,250)</i>	<i>(110,925)</i>	<i>(195,750)</i>

Replace paragraph 31 (c) **with** the following paragraph:

- (c) For rigid foam applications converting to pentane-based technologies has in the past (transition from CFC-11) resulted in significant IOC, even though the blowing agent had a relatively lower price as well as a lower usage rate of about half that of the HCFC-141b it would replace. This was attributed to an increase in foam density, and additional maintenance, insurance and energy costs. However, the overall conversion for rigid foam applications from HCFC-141b to pentane-based technologies still resulted in operating savings even after taking into consideration a 10 per cent increase in foam density and additional maintenance, insurance and energy costs, consistent with the methods of calculating the IOC of Multilateral Fund projects; and

In Appendix I of Annex III, **replace** the table entitled “Incremental operating costs: Rigid polyurethane foam (US \$)”, **with** the following table:

Incremental operating costs: Rigid polyurethane foam (US \$)

Chemical	Prices US \$/kg		Ratio (*)	Consumption (metric tonnes)		
	Low	High		Plant 1	Plant 2	Plant 3
HCFC-141b	1.40	3.50	1.00	5.00	25.00	75.00
HFC-245fa(**)	10.40	12.00	0.50	2.50	12.50	37.50
HFC-245fa (**)	10.40	12.00	0.75	3.75	18.75	56.25
Methyl formate	2.20	3.20	0.50	2.50	12.50	37.50
Water-based systems	1.50	3.50	1.50	7.50	37.50	112.50
Pentane	0.50	2.50	0.50	2.50	12.50	37.50
Cyclopentane	0.80	3.30	0.50	2.50	12.50	37.50
MDI (pentane)	1.50	3.50	0.10	0.50	2.50	7.50

(*) Ratio between HCFC-141b and the alternative blowing agent

(**) The lower and higher prices represent bulk price and small package price allowing for 15% difference.

Description	Plant capacity: 5 tonnes		Plant capacity: 25 tonnes		Plant capacity: 75 tonnes	
Before conversion						
HCFC-141b	7,000	17,500	35,000	87,500	105,000	262,500
After conversion						
HFC-245fa (50%)	26,000	30,000	130,000	150,000	390,000	450,000
HFC-245fa (75%)	39,000	45,000	195,000	225,000	585,000	675,000
Water-based system	11,250	26,250	56,250	131,250	168,750	393,750
Methyl formate	5,500	8,000	27,500	40,000	82,500	120,000
Pentane	2,000	8,000	10,000	40,000	30,000	120,000
Cyclopentane	2,750	10,000	13,750	50,000	41,250	150,000
One year IOC						
HFC-245fa (50%)	19,000	12,500	95,000	62,500	285,000	187,500
HFC-245fa (75%)	32,000	27,500	160,000	137,500	480,000	412,500
Water-based system	4,250	8,750	21,250	43,750	63,750	131,250
Methyl formate	(1,500)	(9,500)	(7,500)	(47,500)	(22,500)	(142,500)
Pentane	(5,000)	(9,500)	(25,000)	(47,500)	(75,000)	(142,500)
Cyclopentane	(4,250)	(7,500)	(21,250)	(37,500)	(63,750)	(112,500)
Two year IOC						
HFC-245fa (50%)	33,060	21,750	165,300	108,750	495,900	326,250
HFC-245fa (75%)	55,680	47,850	278,400	239,250	835,200	717,750
Water-based system	7,395	15,225	36,975	76,125	110,925	228,375
Methyl formate	(2,610)	(16,530)	(13,050)	(82,650)	(39,150)	(247,950)
Pentane	(8,700)	(16,530)	(43,500)	(82,650)	(130,500)	(247,950)
Cyclopentane	(7,395)	(13,050)	(36,975)	(65,250)	(110,925)	(195,750)

Notes

- For pentane projects to the incremental operating costs should be added the following costs:
 - Incremental maintenance of 5% of net incremental investment
 - Incremental insurance of 0.5% of net incremental investment
 - Extra power of 5 kW/dispenser, 10 kW for premixer, 10 kW for ventilation for 2,000 hr/year at 0.10/kW
- The prices of HFC-245fa and methyl formate are global prices as provided by manufacturers
