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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
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**OPTIONS FOR A TRACKING SYSTEM FOR HCFC-141b-BASED PRE-BLENDED POLYOLS  
EXPORTED BY SYSTEMS HOUSES AND USED BY FOAM ENTERPRISES IN IMPORTING  
ARTICLE 5 COUNTRIES (DECISION 66/51(D) AND (E))**

## Background

1. In response to decision 65/12(b), the Secretariat submitted for consideration by the Executive Committee at its 66<sup>th</sup> meeting a document on options for a tracking system, which could be updated on a periodic basis, and which would correlate, by country, the amounts of HCFC-141b-based pre-blended polyols exported by systems houses on the one hand, with the amounts used by foam enterprises in importing Article 5 countries on the other<sup>1</sup>.

2. During the discussion at the 66<sup>th</sup> meeting, it was pointed out that it was difficult to collect data on the amounts of HCFC-141b contained in both imported and exported pre-blended polyols. It was also noted that decision 61/47 of the Executive Committee already provided for the deduction of the amounts of HCFC-141b contained in exported pre-blended polyols from the starting point for aggregate reduction in HCFC consumption. Therefore, collection of data would benefit exporting countries by ensuring greater accuracy of the estimates used for deductions. It would also help establish a framework to avoid double funding.

3. After further consultations among the members, the Executive Committee invited bilateral and implementing agencies, in collaboration with the Governments of Chile, China and Colombia, to provide the Secretariat with the best available data on the amount of HCFC-141b in pre-blended polyols exported in 2009 and 2010. The Executive Committee requested the Secretariat to update the information on the amounts of exports and imports of HCFC-141b contained in pre-blended polyols presented in document UNEP/OzL.Pro/ExCom/66/50, and to report back to the 68<sup>th</sup> meeting so that the Committee might consider when to deduct the amounts of HCFC-141b exported in pre-blended polyols from the starting points for aggregate reductions in HCFC consumption of the countries concerned (decision 66/51). This document is presented in response to decision 66/51.

### Sources of information<sup>2</sup>

4. The amounts of HCFC-141b contained in imported/exported pre-blended polyols used in this document were collected during the preparation of stand-alone HCFC phase-out projects<sup>3</sup> and HCFC phase-out management plans (HPMPs)<sup>4</sup>, as part of the data collection surveys covering foam enterprises, importers of HCFCs, chemical distributors and systems houses, where available. Additional information on pre-blended polyols has been obtained from systems houses and chemical distributors in several Article 5 countries with the assistance of the implementing agencies. The Fund Secretariat notes with appreciation the useful information received from UNDP, UNIDO and the World Bank in this regard.

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<sup>1</sup> UNEP/OzL.Pro/ExCom/66/50.

<sup>2</sup> Additional information on pre-blended polyols could be found in document UNEP/OzL.Pro/ExCom/61/53 “Consumption arising from HCFC-141b contained in pre-blended foam chemicals (polyols) (decision 59/12 and 60/50), and UNEP/OzL.Pro/ExCom/66/50 “Options for a tracking system for HCFC-141b-based pre-blended polyols exported by systems houses and used by foam enterprises in importing Articles 5 countries”.

<sup>3</sup> Stand-alone projects or sector plans for the phase-out of HCFC used in the foam sector have been approved for 14 Article 5 countries.

<sup>4</sup> As of the 67<sup>th</sup> meeting, the Executive Committee had approved HPMPs for 126 Article 5 countries. Thirteen HPMPs had been submitted to the 68<sup>th</sup> meeting (i.e., Bahrain, Democratic People’s Republic of Korea, Ethiopia, Haiti, Myanmar, Peru, Philippines, Syrian Arab Republic, Thailand, Uganda, Turkey, Saudi Arabia and Yemen). HPMPs for six additional Article 5 countries are still outstanding (i.e., Barbados, Botswana, Libya, Mauritania, South Sudan and Tunisia).

## Overview of import and export of HCFC-141b-based pre-blended polyols

5. From the information available to date<sup>5</sup>, only the amounts of HCFC-141b exported in pre-blended polyols by the ten countries shown in Table 1 are known<sup>6</sup>. Over the 2007-2009 period, an average of 568.09 ODP tonnes of HCFC-141b were imported in pre-blended polyols by 31 Article 5 countries, as shown in Annex I to the present document. Approximately 43.6 per cent of this amount was imported by two countries in Asia, namely India and Viet Nam, while 17.3 per cent was imported by Egypt.

**Table 1. Data on amounts of HCFC-141b contained in exported pre-blended polyols(\*)**

Country	HCFC-141b (ODP tonnes)				Starting point
	2008	2009	2010	For deduction	
Argentina	-	-	5.02	(2.51)	Baseline
Brazil	-	-	9.46	(4.73)	Baseline
Chile	12.32	4.86	9.88	(7.37)	Baseline
China	-	74.80	200.86	(137.83)	Baseline
Colombia	33.33	10.07	14.52	(12.30)	Baseline
Kuwait	-	25.59	39.39	(32.49)	Baseline
Mexico	28.60	-	-	(28.60)	2008
Saudi Arabia**	41.25	67.76	81.18	(74.47)	Baseline
South Africa	-	-	32.20	(16.10)	Baseline
Syrian Arab Republic	11.88	23.10	17.16	(20.13)	Baseline
Total	127.38	206.18	409.67	(336.53)	

(\*) Excluding Republic of Korea, Singapore and United Arab Emirates.

(\*\*) Estimated figures, not officially recorded.

6. Based on the above information, an average of 568.09 ODP tonnes of HCFC-141b were imported in pre-blended polyols by Article 5 countries over the 2007-2009 period, while an average of 336.53 ODP tonnes were exported by ten Article 5 countries over the 2009-2010 period, i.e., a difference of 231.56 ODP tonnes. The difference between the amounts of HCFC-141b imported and exported in pre-blended polyols could be explained as follows:

- (a) Most Article 5 countries have not required import/export licenses for HCFC-141b pre-blended polyols, as the amount of HCFC-141b contained therein is not reported under Article 7 of the Montreal Protocol. Furthermore, the harmonized codes (HS) most commonly used for polyols, group all polyols into one including those pre-blended and containing different blowing agents. The precise amounts of HCFC-141b imported and/or exported in pre-blended polyols by Article 5 countries reported in this document, are based on best estimates provided by systems houses, chemical distributors, and/or foam enterprises;
- (b) HCFC-141b pre-blended polyols used in Article 5 countries have historically been supplied by systems houses and/or chemical suppliers located in non-Article 5 countries, from three Article 5 countries that have not received assistance from the Multilateral Fund (namely, Republic of Korea, Singapore and United Arab Emirates), and from systems houses located in free-trade zones in Article 5 countries. It could be assumed that most of the 231.56 ODP tonnes is supplied by these sources, although information confirming this assumption is not available; and

<sup>5</sup> HCFC stand-alone projects, HPMPs that have been approved by the Executive Committee, and HPMPs submitted to the 68<sup>th</sup> meeting (i.e., Bahrain, People's Democratic Republic of Korea, Peru, Saudi Arabia and Syrian Arab Republic).

<sup>6</sup> The total production of HCFC-141b pre-blended polyols by systems houses located in Egypt, India, Indonesia, Islamic Republic of Iran, Malaysia, Thailand and Viet Nam is only used for the local market.

- (c) The assistance to be provided to Article 5 countries importing HCFC-141b pre-blended polyols is based on the average amount imported over the 2007-2009 period<sup>7</sup>, while the amount of HCFC-141b exported in pre-blended polyols by the ten countries listed in Table 1 is based on the average amount exported in 2009 and 2010, which are the years selected by the countries for their starting point for aggregate reduction in HCFC consumption, except for Mexico, which selected 2008 as its starting point<sup>8</sup>. Major differences in the economic growth between the two periods were experienced in all Article 5 countries, which also had an impact, albeit minor, on the amounts of HCFC-141b contained in polyols.

7. In light of decision 61/47(d)<sup>9</sup>, the amounts of HCFC-141b exported in pre-blended polyols by Argentina<sup>10</sup>, Kuwait<sup>11</sup>, Saudi Arabia<sup>12</sup>, South Africa<sup>13</sup> and Syrian Arab Republic<sup>14</sup> were reported under their HPMPs, and the respective Governments had agreed to deduct them from their starting point for aggregate reduction in HCFC consumption.

8. Considering that agreements have been reached between the Governments of the other five Article 5 countries exporting HCFC-141b in pre-blended polyols (i.e., Brazil, Chile, China, Colombia and Mexico) and the Executive Committee, the Executive Committee might wish to consider discounting from their starting point the amounts of HCFC-141b exported in pre-blended polyols shown in Table 1, at the time Stage II of each country's HPMP is submitted.

### **Recommendation**

9. The Executive Committee may wish to consider:

- (a) Noting document UNEP/OzL.Pro/ExCom/68/46 containing information on the amounts of HCFC-141b-based pre-blended polyols exported by Article 5 countries;
- (b) Discounting, at the time Stage II of the country's HPMPs is submitted, the following amounts of HCFC-141b exported in pre-blended polyols from the starting point for aggregate reductions in HCFC consumption: 4.73 ODP tonnes for Brazil; 7.37 ODP tonnes for Chile; 137.83 ODP tonnes for China; 12.30 ODP tonnes for Colombia and 28.60 ODP tonnes for Mexico; and
- (c) Encouraging relevant Article 5 countries to consider establishing a national system for recording the amounts of HCFC-141b contained in pre-blended polyols that are imported and/or exported (where applicable) to support the ban on imports of pure HCFC-141b or that contained in pre-blended polyols that will be issued once all the foam enterprises had been converted, and facilitate the monitoring of these enterprises to sustain the phase-out of HCFC-141b.

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<sup>7</sup> In line with decision 61/47(c)(ii).

<sup>8</sup> In line with decision 66/51(b).

<sup>9</sup> "Article 5 Parties with eligible enterprises manufacturing HCFC-141b pre-blended polyol systems would be provided with assistance calculated on the basis of consumption of HCFC-141b sold domestically, on the understanding that the full consumption of HCFC-141b by those enterprises manufacturing pre-blended polyol systems would be deducted from the starting point."

<sup>10</sup> UNEP/OzL.Pro/ExCom/66/28.

<sup>11</sup> UNEP/OzL.Pro/ExCom/66/40.

<sup>12</sup> UNEP/OzL.Pro/ExCom/68/39.

<sup>13</sup> UNEP/OzL.Pro/ExCom/67/29.

<sup>14</sup> UNEP/OzL.Pro/ExCom/68/40.

Annex I

Amount of HCFC-141b used in Article 5 countries

No.	Country	HCFC-141b (ODP tonnes)		
		In bulk (*)	Imported polyol (**)	Total
1	Algeria	5.70	5.36	11.06
2	Argentina	113.40		113.40
3	Armenia		0.83	0.83
4	Bahrain	0.50	2.06	2.56
5	Bangladesh	21.30		21.30
6	Belize	0.20		0.20
7	Bolivia	1.00	0.60	1.60
8	Bosnia and Herzegovina	3.00	3.47	6.47
9	Botswana	0.01		0.01
10	Brazil	521.60		521.60
11	Cameroon	22.10		22.10
12	Chile	39.30		39.30
13	China	5,941.30		5,941.30
14	Colombia	151.80		151.80
15	Costa Rica	3.60	18.11	21.71
16	Croatia	(0.20)		(0.20)
17	Cuba	2.60	13.35	15.95
18	Democratic People's Republic of Korea	16.00	24.50	40.50
19	Dominican Republic	1.20	19.51	20.71
20	Ecuador	0.70	20.67	21.37
21	Egypt	129.60	98.34	227.94
22	El Salvador	3.40	4.94	8.34
23	Guatemala	1.10	1.40	2.50
24	Honduras	1.90	0.80	2.70
25	India	865.50	83.05	948.55
26	Indonesia	132.70		132.70
27	Iran (Islamic Republic of)	216.90		216.90
28	Jamaica	3.60		3.60
29	Jordan	28.80	11.31	40.11
30	Kuwait	75.20	10.64	85.84
31	Kyrgyzstan	0.80	0.73	1.53
32	Lao, PDR			-
33	Lebanon	37.50		37.50
34	Libya	27.50		27.50
35	Malaysia	162.60		162.60
36	Maldives	0.70		0.70
37	Mauritius	0.10		0.10
38	Mexico	673.70		673.70
39	Morocco	20.90		20.90
40	Myanmar	0.10		0.10
41	Namibia	0.30		0.30
42	Nicaragua	0.60	0.31	0.91
43	Nigeria	149.70		149.70
44	Oman	1.10	1.11	2.21
45	Pakistan	138.50		138.50
46	Panama	2.30		2.30
47	Panama		2.50	2.50
48	Paraguay	0.10	1.36	1.46
49	Peru	1.80	27.91	29.71
50	Philippines	63.40		63.40

No.	Country	HCFC-141b (ODP tonnes)		
		In bulk (*)	Imported polyol (**)	Total
51	Qatar	0.60		0.60
52	Rwanda	0.20		0.20
53	Saudi Arabia	341.00		341.00
54	Somalia		1.68	1.68
55	South Africa	160.10		160.10
56	Sri Lanka	1.90		1.90
57	Sudan	40.70		40.70
58	Swaziland	5.60		5.60
59	Syrian Arab Republic	67.71	3.25	70.96
60	Thailand	205.30		205.30
61	The Former Yugoslav Republic of Macedonia		1.55	1.55
62	Trinidad and Tobago	2.30		2.30
63	Tunisia	1.60		1.60
64	Turkey	197.10	30.80	227.90
65	Uruguay	1.50	5.33	6.83
66	Venezuela (Bolivarian Republic of)	39.60	1.91	41.51
67	Vietnam	53.90	164.60	218.50
68	Zimbabwe	1.00	6.11	7.11
	<b>Total</b>	<b>10,705.62</b>	<b>568.09</b>	<b>11,273.71</b>

(\*) Baseline for compliance (2009 and 2010 average consumption). The total amount excludes 1,208.39 ODP tonnes of HCFC-141b consumed by Republic of Korea, Singapore and United Arab Emirates (i.e., countries that were requested not to seek assistance from the Multilateral Fund).

(\*\*) 2007-2009 average consumption as per decision 61/47(c)(ii). These figures have been extracted from approved stand-alone projects or sector plans for the phase-out of HCFC in 14 Article 5 countries and approved HPMPs for 126 Article 5 countries.

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