

Supplement to the May 2017 TEAP Replenishment Task Force Report

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Replenishment Task Force

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TEAP

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Decision XXVIII/5

- Decision XXVIII/5 requested TEAP to prepare a report to enable parties to decide on the appropriate level of the replenishment of the Multilateral Fund for the triennium 2018-2020
- TEAP established a Replenishment Task Force (RTF) and presented its May 2017 RTF Report to OEWG-39
- Based on discussions in a contact group, OEWG-39 requested the TEAP to elaborate on specific groups of elements in a supplementary report for MOP-29
- After RTF and TEAP review, the Supplement Report was posted as Volume II of the October 2017 TEAP Report

Decision XXVIII/5 Task Force

Co-chairs:

- **Lambert Kuijpers** (The Netherlands, member RTOC)
- **Bella Maranion** (USA, co-chair TEAP)
- **Shiqiu Zhang** (China, senior expert member TEAP)

Members:

- **Paulo Altoe** (Brazil, co-chair FTOC)
- **Suely Carvalho** (Brazil, senior expert member TEAP)
- **Daniel Colbourne** (UK, member RTOC)
- **Sukumar Devotta** (India, member RTOC)
- **Horace Nelson** (Jamaica, member RTOC)
- **Fabio Polonara** (Italy, co-chair RTOC)
- **Helen Tope** (Australia, co-chair MCTOC)
- **Dan Verdonik** (USA, co-chair HTOC)
- **Helen Walter-Terrinoni** (USA, member FTOC)

Requests related to the TEAP RTF May 2017 report

- Elaboration on paragraph 3 of the Terms of Reference as expressed in decision XXVIII/5 on “indicative figures for any additional resources that would be needed to further encourage the use of low-GWP or zero-GWP alternatives”;
- To present cost effectiveness figures in tonnes, ODP-tonnes and CO₂ equivalent;
- To give a clearer distinction between costs associated with HCFC-related and HFC-related activities

Requests related to the TEAP RTF May 2017 report - 2

- To present a scenario comparing previously approved projects with business plan estimates on an annual basis in relation to determining uncertainty for planned activities;
- To account for recent ExCom decisions.

Additional elaboration on the following elements of the total funding requirement

- The funding components for HCFC Phase-out Management Plans;
- The HCFC Production Phase-out Management Plans;
- Non-investment and supporting activities;
- HFC phase-down enabling activities; and
- HFC-23 mitigation

Outline of the TEAP RTF supplement report

- Executive Summary and Intro (Ch. 1)
- Overall questions to the report (Ch. 2)
- Elaboration on the funding components for HPMPs (Ch. 3)
- Accounting for the HCFC production phase-out (Ch. 4)
- Non-investment and supporting activities (Ch. 5)
- HFC phase-down enabling activities (Ch. 6)
- HFC-23 mitigation (Ch. 7)
- Summary (Ch. 8)
- Annex 1 – Summary of the OEWG-39 requested elaboration for the TEAP RTF supplement report
- Annex 2 – Calculation of planned funding to achieve a maximum 35% reduction in HCFC consumption

Adjusting planned to approved funding for HPMPs

- For 2005-2016, the average percentage of funding for the total of approvals is 83.2% of the funding for the total of planned activities from the Business Plan
 - Average funding agreed by the ExCom for each activity was on average 16.8% lower than funding estimated in the Business Plan
- By taking the differences between planned and approved funding for the years 2005 through 2016, the calculated uncertainty range is on average +/- 13.5%
- Using this uncertainty value, total funding for HPMP activities is, in principle, approved at a value in the range of about 70-97% of the funding estimated for planned activities

Impact of ExCom-79 on (adjusted) HPMP funding

- Planned HPMP activities:
 - For non-LVC countries, funding reduced from US\$ 97.1 to US\$ 74.1 million for the triennium 2018-2020;
 - For LVC countries, funding reduced by US\$ 0.23 million since this amount was moved to the approved funding amount for 2017.
- Approved HPMP activities:
 - For non-LVC countries, the funding requirement increased from US\$ 289.4 to US\$ 296.2 million;
 - For LVC countries there was no change, because some planned funding became approved funding for 2017, which is outside the 2018-2020 triennium.
- ***As a result of the decisions from ExCom-79, based on the adjusted planned activities, the total funding requirement for HPMPs (excluding any HPMPs stage III) has decreased by US\$ 12.5 million, from US\$ 388.4 to US\$ 375.9 million (for the triennium 2018-2020).***

Additional requests related to HPMPs

- Indicative figures for any additional resources to further encourage use of low- or zero-GWP alternatives:
 - May report estimated US\$ 0-10 million for additional HPMP demo projects
 - May report estimated US\$ 13.5-20.2 million for HFC enabling activities (incl. demo projects)
- Deferring HPMP stage III activities to the triennium 2021-2023 would reduce the funding requirement presented in the May 2017 report (US\$ 0-70.95 million) to zero.

Additional requests related to HPMPs - 2

- Distinction between costs associated with HCFC and HFC related activities; the May 2017 report addressed this in separate chapters:
 - Funding for HCFC consumption phase-out activities (Ch. 3)
 - Funding for HCFC production phase-out (Ch. 4)
 - Funding for non-investment components and supporting activities (Ch. 5)
 - Funding for HFC phase-down enabling activities (Ch. 6)
 - Funding for HFC-23 mitigation activities (Ch. 7)

HCFC Production Phase-out Management Plans (HPPMPs)

- In the May 2017 report, the RTF assumed equal funding tranches for the 14 years for the Chinese HPPMP in the period 2017-2030
 - This leads to a funding requirement of US\$ 65.62 million (US\$ 21.87 million for each of the three years) for the triennium 2018-2020
 - This assumes a first tranche of US\$ 21.87 in the year 2017
- In considering two funding tranches for the Chinese HPPMP in the triennium 2018-2020, the funding for the next triennium is estimated at US\$ 47.15 or US\$ 51.04 million, depending on when the approval decision would be taken and on how tranches would be specified.

May 2017 RTF report estimates	HPMP stage I and II funding (US\$ million)	Total range funding requirement (US\$ million)
Funding determined in the May 2017 report	406.3	602.7-748.9
Requested funding scenarios in the Supplement RTF Report		
No HPMP stage III, no demo HCFC, 2 tranches HPPMP	406.3	584.2-653.4

Sequential, cumulative impacts of requested funding scenarios from OEWG-39 to the May 2017 RTF report estimates	HPMP I and II funding reductions (cumulative) US\$ million	Average (range) total funding requirement US\$ million
1) Re-scaling of planned funding for HPMPs as in the May 2017 report	17.9 (17.9)	600.9 (568.7-632.8)
2) Impact of ExCom-79 on the (rescaled) funding as determined in the May 2017 report	12.5 (30.4)	588.4 (558.9-617.8)
3) Maintain sets of planned activities for countries with approvals not achieving 35% reduction	34.5 (64.9)	553.8 (529.0-578.5)
4) Additional planned activities for a 35% reduction for these countries (in row above)	16.4 (81.3)	537.4 (514.7-560.0)

Cost-effectiveness values of HPMPs (including agency support costs)

- An average (country-weighted using the ODP-tonnes approvals) cost effectiveness value has been calculated, based on a representative number of non-LVC and LVC countries (where the approvals usually concern one HCFC, or a mix of two or three HCFCs)
 - For non-LVC countries (*including China*) = US\$ 5.18 per kg ODS (US\$ 3.75 per t CO₂-eq.)
 - For non-LVC countries (*excluding China*) = US\$ 5.79 per kg ODS (US\$ 5.05 per t CO₂-eq.)
 - For LVC countries = US\$ 9.23 per kg ODS (US\$ 7.08 per t CO₂-eq.)

Funding for the Compliance Assistance Programme (CAP) dependent on annual increase

- The CAP funding (including support costs) in the May 2017 report was estimated at US\$ 34.8 million for the triennium 2018-2020, based on an annual 3% increase
- CAP funding for the triennium 2018-2020 at varying annual increases would be:
 - 0% increase per annum = US\$ 32.8 million
 - 6% increase per annum = US\$ 36.9 million
- Each 3% increase in CAP funding would add about US\$ 2 million to the total funding requirement.

HFC phase-down enabling activities

- OEWG-39 requested the TEAP RTF in its supplementary report to “further disaggregate the cost of enabling activities with respect to the different elements addressed”
- May 2017 report used the categories for enabling activities as defined in Decision XXVIII/2, para 20: capacity-building and training, IS, Article 4B licensing, reporting, demonstration projects and development of national strategies
- RTF took the approach of considering two categories of funding for HFC phase-down enabling activities:
1) non-investment projects and 2) investment projects

HFC phase-down enabling activities - 2

- In the period 2018-2020, the primary funding for enabling activities for non-investment projects would be project preparation, including preparation of proposals for potential demonstration projects
- Also enabling activities as per ExCom Decision 79/46(b)(ii):
 - a. Activities to facilitate and support the early ratification of the Kigali Amendment;
 - b. Initial activities identified in paragraph 20 of decision XXVIII/2, including country-specific activities aimed at initiating supporting institutional arrangements, the review of licensing systems, data reporting on HFC consumption and production, and demonstration of non-investment activities, and excluding institutional strengthening, as addressed in decision 78/4(b);
 - c. National strategies that contained the activities in sub-paragraphs a) and b) above

HFC phase-down enabling activities

Funding (US\$ million)	2018-2020
Non-investment projects (including project preparation and demonstration projects)	13.5-20.2
Investment projects	8.0-24.0
Total	21.5-44.2

HFC-23 mitigation

- OEWG-39 requested the TEAP RTF to develop a scenario involving the closure of HCFC-22 production plants, with or without existing incineration facilities for mitigating HFC-23 emissions
- Funding for the closure of HCFC-22 swing plants is currently not eligible under the HCFC guidelines
- However, ExCom Decision 79/47(c) will consider possible cost-effective options for compensating HCFC-22 swing plants to allow for compliance with the HFC-23 by-product control obligations of the Kigali Amendment
- Lacking the guidance and decision for compensation by ExCom, RTF was unable to develop a scenario

Impact of ExCom-80 decisions

Impact of ExCom-80 decisions

ExCom-80 took a number of decisions which have consequences for the 2018-20 funding requirement, compared to the values given in the supplement report:

- China HPPMP, 3 tranches in 2018-20: + 19.72 M
- Approved funding tranches: + 35.20 M
- Less planned funding (now approved): - 4.30 M
- CAP funding 2018-2020: - 0.89 M
- IS funding planned 2018-2020: + 3.75 M

TOTAL + 53.48 M

Implying that ALL total funding requirement values in the supplement report scenarios increase by US\$ 53.48 million

Back-up slides

Sequential, cumulative impacts of requested funding scenarios from OEWG-39 to the May 2017 RTF report estimates	HPMP funding (US\$ million) (reduction compared to May 2017 report)	Range of total funding requirement (US\$ million)
Funding determined in the May 2017 report	406.3	602.7-748.9
Various changes compared to May 2017 report (no stage III, no demo HCFC, 2 tranches HPPMP)		584.2-653.4
1) Rescaling of planned activities as determined in May 2017 report	388.4 (17.9)	568.7-632.8
2) Impact of ExCom-79 on the (rescaled) funding as determined in May 2017 report	375.9 (30.4)	558.9-617.8
3) Maintain sets of planned activities for countries with approvals not achieving 35% reduction	341.4 (64.9)	529.0-578.5
4) Additional planned activities for a precise 35% reduction for these countries (in row above)	325.0 (81.3)	514.7-560.0

Approved versus planned activities

Year	Business Plan	Approvals	Difference	%approvals	Cumulative
2016	175.906.212	134.886.955	41.019.257	77%	
2015	172.925.384	185.521.702	-12.596.318	107%	
2014	150.349.262	109.636.438	40.712.824	73%	2014-2016
2014-2016	499.180.858	430.045.095	69.135.763	86,15%	86,15%
2013	163.058.422	143.350.645	19.707.777	88%	
2012	158.193.207	118.099.916	40.093.291	75%	
2011	251.685.220	227.553.662	24.131.558	90%	2011-2016
2011-2013	572.936.849	489.004.223	83.932.626	85,35%	85,72%
2010	205.296.416	103.360.124	101.936.292	50%	
2009	106.014.427	87.689.407	18.325.020	83%	
2008	145.296.562	142.226.527	3.070.035	98%	2008-2016
2008-2010	456.607.405	333.276.058	123.331.347	72,99%	81,92%
2007	171.419.512	135.794.742	35.624.770	79%	
2006	161.412.541	136.961.591	24.450.950	85%	
2005	226.796.158	213.353.085	13.443.073	94%	2005-2016
2005-2007	559.628.211	486.109.418	73.518.793	86,86%	82,33%
2004	221.409.010	186.227.602	35.181.408	84%	
2003	226.732.762	173.814.977	52.917.785	77%	
2002	195.635.529	185.628.199	10.007.330	95%	2002-2016
2002-2004	643.777.301	545.670.778	98.106.523	84,76%	83,24%
2001	166.859.265	144.052.417	22.806.848	86%	
2000	131.542.713	125.740.663	5.802.050	96%	

Funding for the various activities and ranges for the total

ACTIVITIES (all amounts in US\$ million)						
HPMP actvts	May 2017	Removing elements as requested	Rescaling planned actvts	July 2017 impact	Certain planned HPMPs cancl'd	Strict need for 35% reduction
Total range incl. HPMP stage III	391.8-491.9	391.8-421.0				
HPMPs I/II value	406.3	406.3	388.4	375.9	341.4	325.0
HPMP I/II range	391.8-420.9	391.8-420.9	376.3-400.4	366.5-385.3	336.6-346.1	322.3-327.6
	May 2017	If no stage III	If no stage III	If no stage III	If no stage III	If no stage III
HPMP stg III	0-70.95	0	0	0	0	0
	May 2017	2 tranches	2 tranches	2 tranches	2 tranches	2 tranches
HPPMPs (China)	67.2 (65.622)	48.8 (47.154) 52.6 (51.040)	48.8 (47.154) 52.6 (51.040)	48.8 (47.154) 52.6 (51.040)	48.8 (47.154) 52.6 (51.040)	48.8 (47.154) 52.6 (51.040)
	May 2017	No demo HCFC	No demo HCFC	No demo HCFC	No demo HCFC	No demo HCFC
Non-inv/sup	114.1-124.1	114.1	114.1	114.1	114.1	114.1
	May 2017					
HFC enabling	21.5-44.2	no change (21.5-44.2)	no change (21.5-44.2)	no change (21.5-44.2)	no change (21.5-44.2)	no change (21.5-44.2)
	May 2017					
HFC-23 mitigation	8.0-21.5	no change (8.0-21.5)	no change (8.0-21.5)	no change (8.0-21.5)	no change (8.0-21.5)	no change (8.0-21.5)
	May 2017					
(CAP 3%)	May 2017		Supplement	Supplement	Supplement	Supplement
Total	602.7-748.9	584.2-653.4	568.7-632.8	558.9-617.8	529.0-578.5	514.7-560.0
(0% CAP change)					US\$ 2.0 million lower numbers	
(6% CAP change)					US\$ 2.1 million higher numbers	
CAP increase			0%	3%	4.5%	6%
Total supp (CAP)			112.1 (32.8)	114.1 (34.8)	115.1 (35.8)	116.2 (36.9)