



**Programa de las  
Naciones Unidas  
para el Medio Ambiente**



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COMITÉ EJECUTIVO DEL FONDO MULTILATERAL  
PARA LA APLICACIÓN DEL  
PROTOCOLO DE MONTREAL  
Septuagésima séptima Reunión  
Montreal, 28 de noviembre – 2 de diciembre de 2016

**INFORME SOBRE LA MARCHA DE LAS ACTIVIDADES DEL PNUD  
AL 31 DE DICIEMBRE DE 2015**

1. El presente documento recoge el informe sobre la marcha de las actividades del PNUD al 31 de diciembre de 2015<sup>1</sup>, y consta de:

Resumen ejecutivo

- Parte I: marcha de las actividades de ejecución al 31 de diciembre de 2015 (acumulativo)  
Parte II: marcha de las actividades de ejecución de proyectos en 2015  
Partes III: observaciones y recomendaciones efectuadas por la Secretaría  
Anexo I: datos por país de la ejecución del proyecto en 2015

**Resumen ejecutivo**

2. Lo que sigue es un resumen de la marcha de las actividades de ejecución de los proyectos y actividades ejecutadas por el PNUD hasta el 31 de diciembre de 2015, para el año 2015, y acumulativamente, desde 1991:

- a) **Eliminación:** en 2015 se eliminó un consumo de 223,3 toneladas PAO de HCFC y se aprobó la eliminación de otras 418,9 toneladas PAO. Desde 1991 se han eliminado 66 440 toneladas PAO del consumo de SAO de un total previsto de 67 072 toneladas PAO de proyectos aprobados (excluyendo proyectos cancelados y transferidos);

<sup>1</sup> Se adjunta el informe sobre la marcha de las actividades. Los datos se han incluido en la base de datos de Informes refundidos sobre la marcha de las actividades, y pueden obtenerse bajo petición.

- b) **Desembolsos/aprobaciones:** en 2015 se desembolsaron 32,02 millones de \$EUA y, partiendo del informe sobre la marcha de las actividades de 2014 se preveía el desembolso de 26,91 millones de \$EUA, lo que representa un régimen de desembolso del 119 por ciento de lo previsto. De un total de 648,87 millones de \$EUA aprobados para ser desembolsados (excluyendo los gastos de apoyo a los organismos), se han desembolsado, acumulativamente, 713,14 millones de \$EUA. Ello representa un régimen de desembolso del 91 por ciento. En 2015 se aprobaron para fines de ejecución 34,2 millones de \$EUA;
- c) **Relación de costo a eficacia (en PAO):** desde 1991 la relación de costo a eficacia de los proyectos de inversión aprobados y de los que se derivó una reducción permanente del consumo, fue de 9,35 \$EUA/kg. La relación media de costo a eficacia de los proyectos de inversión por tonelada PAO fue de 8,26 \$EUA/kg para los proyectos terminados y de 65,37 \$EUA/kg para los proyectos en curso<sup>2</sup>;
- d) **Número de proyectos terminados:** en 2015 se terminaron 69 proyectos. Desde 1991 se terminaron 2 122 proyectos de los 2 297 proyectos aprobados (excluyendo los proyectos cerrados o transferidos). Esto representa un régimen de terminación del 92 por ciento;
- e) **Rapidez de la entrega – proyectos de investigación:** los proyectos terminados en 2015 lo fueron, de media, 41 meses después de su aprobación. Desde 1991 el periodo medio de tiempo para la terminación de proyectos de inversión ha venido siendo de 33 meses tras su aprobación. El primer desembolso en estos proyectos se produjo, de media, 13 meses tras su aprobación;
- f) **Rapidez de la entrega – proyectos sin investigación:** los proyectos terminados en 2015 lo fueron, de media, 39 meses después de su aprobación. Desde 1991 el periodo medio de tiempo para la terminación de proyectos sin inversión ha venido siendo de 40 meses tras su aprobación. El primer desembolso en estos proyectos se produjo, de media, 13 meses tras su aprobación;
- g) **Preparación de proyectos:** de las 519 actividades de preparación de proyectos, aprobadas a finales de 2015, 474 se han terminado. En 2015 se terminaron nueve proyectos, quedando 45 en curso;
- h) **Demoras en la ejecución:** A finales de 2015 había un total de 68 proyectos de inversión en curso de ejecución. Por término medio, estos proyectos sufren una demora de 19 meses. Sin embargo, el número de proyectos clasificados como “proyectos con demoras de ejecución” y sujetos a los procesos de cancelación de proyectos es de tan sólo uno, dado que los proyectos plurianuales (APA) no quedan sujetos a estos procedimientos; y
- i) **Proyectos plurianuales (APA):** en 2015 el PNUD ejecutó tres proyectos APA para la eliminación de los CFC, un proyecto APA relativo a la producción acelerado de CFC y 46 proyectos APA para Planes de gestión de eliminación de los HCFC. Desde 1991 se han aprobado 119 proyectos APA y otros 66 han sido terminados.

#### **Parte I.- Marcha de las actividades de ejecución al 31 de diciembre de 2015 (acumulativo)**

3. Desde aquellas fechas, el Comité Ejecutivo ha aprobado aproximadamente 809,94 millones de \$EUA, monto que consta de 713,14 millones de \$EUA para la ejecución de proyectos

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<sup>2</sup> La mayor cuantía del costo eficaz de los proyectos en curso se debe principalmente a las cifras PAO más bajas de los HCFC, pero también a los medios empleados por los organismos para asignar la eliminación.

de inversión y de proyectos sin inversión y 96,81 millones de \$EUA para gastos de apoyo y sostén administrativo, como se recoge en el Cuadro 1. En 2015 se aprobaron 77 nuevos proyectos y actividades. Se prevé que este nivel de financiación aporte una eliminación de 418,9 toneladas PAO en el consumo de SAO.

**Cuadro 1.- Financiación aprobada por sector para el PNUD al 31 de diciembre de 2015**

Sector	Financiación (\$EUA)
Aerosoles	26 675 161
Destrucción	3 629 626
Lucha contra incendios	50 000
Espumas	173 043 155
Halones	4 996 973
Fumigantes	20 082 828
Plan de eliminación	229 433 646
Agentes de proceso	1 286 923
Producción	1 373 900
Equipos de refrigeración	135 505 397
Varios	52 941 131
Disolventes	63 700 008
Esterilizantes	417 628
<b>Total parcial</b>	<b>713 136 376</b>
Costos administrativos	96 806 287
<b>Suma Total</b>	<b>809 942 663</b>

4. En el cuadro 2 se presenta un resumen de la situación de los proyectos ejecutados por categoría.

**Cuadro 2.- Situación de la ejecución de proyectos, por tipo**

Tipo	Número de proyectos*			Financiación (\$EUA)			
	Aprobados	Terminados	% Terminado	Aprobada	Desembolsada	Saldo	% desembolsado
Programa de país	22	22	100	1 628 797	1 628 797	0	100
Demonstración	37	32	86	19 706 968	16 165 634	3 541 334	82
Fortalecimiento institucional (FI)	209	183	88	42 994 988	38 282 101	4 712 887	89
Inversión	1 202	1 134	94	587 662 665	539 316 003	48 346 662	92
Preparación de proyecto	519	474	91	21 889 038	19 489 968	2 399 070	89
Asistencia técnica	280	249	89	37 663 431	32 401 283	5 262 148	86
Capacitación	28	28	100	1 590 489	1 590 489	0	100
<b>Total</b>	<b>2 297</b>	<b>2 122</b>	<b>92</b>	<b>713 136 376</b>	<b>648 874 275</b>	<b>64 262 101</b>	<b>91</b>

\* Excluye proyectos cerrados y transferidos.

5. El cuadro 3 presenta una reseña de la situación en que se encuentra la ejecución de proyectos, por año<sup>3</sup>. Todos los proyectos y actividades aprobados entre 1991 y finales de 2001, así de 2003, 2004, 2006 y 2007, están ya terminados.

<sup>3</sup> Los datos se presentan con arreglo al año en el que el Comité Ejecutivo aprobó un proyecto dado. Se tratan por igual todas las aprobaciones (proyectos con inversión y sin inversión) (es decir, un proyecto de inversión o un tramo de financiación de un APA de 1 millones de \$EUA se considera como un proyecto, al igual que una preparación de programa de país por valor de 30 000 \$EUA). Los indicadores clave del resumen anual son, a saber: el porcentaje

**Cuadro 3.- Situación en que se encuentra la ejecución de proyectos, por año**

Año	Número de proyectos*			Financiación (\$EUA)			
	Aprobados	Terminados	% terminado	Aprobada	Desembolsada	Saldo	% desembolsado
1991	15	15	100	1 149 032	1 149 032	0	100
1992	67	67	100	8 619 002	8 619 002	0	100
1993	57	57	100	13 204 712	13 204 712	0	100
1994	148	148	100	49 481 581	49 481 581	0	100
1995	117	117	100	29 599 446	29 599 446	0	100
1996	83	83	100	27 838 805	27 838 805	0	100
1997	188	188	100	44 056 257	44 056 257	0	100
1998	172	172	100	31 305 010	31 305 010	0	100
1999	204	204	100	35 896 884	35 896 884	0	100
2000	149	149	100	31 268 361	31 268 361	0	100
2001	179	179	100	35 292 271	35 292 271	0	100
2002	117	116	99	44 316 422	44 229 501	86 921	100
2003	64	64	100	36 336 530	36 336 530	0	100
2004	69	69	100	24 803 267	24 802 714	553	100
2005	53	52	98	29 125 658	28 254 081	871 577	97
2006	62	62	100	15 753 459	15 753 496	-37	100
2007	54	54	100	12 142 486	12 142 486	0	100
2008	84	83	99	23 494 189	22 930 362	563 827	98
2009	93	90	97	13 306 372	13 115 377	190 995	99
2010	43	42	98	19 843 138	19 636 740	206 398	99
2011	63	57	90	60 582 103	58 819 469	1 762 634	97
2012	29	21	72	33 934 953	29 477 623	4 457 330	87
2013	43	17	40	34 594 128	21 740 029	12 854 099	63
2014	67	15	22	22 995 687	13 770 781	9 224 906	60
2015	77	1	1	34 196 623	153 725	34 042 898	0
<b>Total</b>	<b>2 297</b>	<b>2 122</b>	<b>92</b>	<b>713 136 376</b>	<b>648 874 275</b>	<b>64 262 101</b>	<b>91</b>

\* Excluye proyectos cerrados y transferidos.

## Parte II.- Marcha de las actividades de ejecución de proyectos en 2015

6. La Secretaría analizó la marcha de las actividades de ejecución país a país, habida cuenta de las demoras acaecidas en las mismas respecto de las fechas de terminación previstas que se hubieran notificado en 2015, el impacto potencial de dichas demoras en la eliminación y el régimen de desembolsos previsto.

### *Demoras en la ejecución*

7. El análisis del informe sobre la marcha de las actividades de 2015 puso de manifiesto que, de los 50 proyectos en curso, excluyendo proyectos de FI y de preparación de proyectos, 22 tienen una fecha prevista de terminación prorrogada desde el informe sobre la marcha de las actividades de 2014. El Comité Ejecutivo puede estimar oportuno tomar nota de que el PNUD presentará a la 78ª reunión un informe sobre un proyecto con demoras en su ejecución<sup>4</sup> (que también fue clasificado en 2014 como con demoras en su ejecución), el cual puede encontrarse en el apéndice I del anexo III del informe refundido sobre la marcha de las actividades (UNEP/OzL.Pro/ExCom/77/11).

de proyectos terminados, el volumen de PAO eliminado, y el porcentaje de fondos desembolsados. Al analizar los datos de los fondos desembolsados, habrá de observarse que hay tres tipos de desembolsos: durante la fase de ejecución, posterior a la fase de ejecución y de financiación retroactiva.

<sup>4</sup> El Comité Ejecutivo ha definido los proyectos con demoras en su ejecución como proyectos aprobados hace ya más de 18 meses, en los que se ha realizado un desembolso inferior al uno por ciento de los fondos de financiación, o proyectos previstos para terminarse 12 meses más tarde de lo indicado en el último informe sobre la marcha de las actividades (decisión 22/61).

8. El PNUD terminó el 75 por ciento de los proyectos que había previsto terminar en 2015 y alcanzó el 55 por ciento de los objetivos de eliminación previstos. El PNUD había previsto desembolsos en 46 países o regiones, y alcanzó un régimen general de desembolsos del 119 por ciento en 2015.

9. Esta parte del informe sobre la marcha de las actividades recoge un resumen de la información financiera y sobre la marcha de las actividades de los proyectos, y realza retrasos en la ejecución o impedimentos a la misma en los siguientes proyectos en curso<sup>5</sup>:

- a) Proyectos conexos a los CFC y a los CTC;
- b) Proyectos conexos a los inhaladores de dosis medida (IDM), la eliminación de los desechos de SAO, enfriadores y planes de gestión de refrigerantes;
- c) Proyectos conexos a la eliminación de los HCFC, incluyendo en ello la preparación de proyectos, los proyectos de demostración, los planes de gestión de eliminación de los HCFC y estudios sobre alternativas a las SAO; y
- d) Proyectos de FI.

#### Actividades conexas a los CFC y los CTC

10. Al 31 de diciembre de 2015 había todavía en curso dos APA en la India con actividades pendientes, entre las que se incluía la eliminación acelerada de la producción de CFC y el plan de eliminación de CTC. Conforme a la decisión 75/19 a) ii), estas APA se terminarán en diciembre de 2016 y los fondos remanentes se reembolsarán al Fondo Multilateral en la primera reunión de 2017. No obstante, el PNUD está solicitando la revisión de la fecha de terminación prevista para noviembre de 2017. Al recibo del visto bueno del Gobierno, los fondos remanentes se reembolsarán y el proyecto se cerrará.

#### IDM, destrucción de desechos SAO, enfriadores y planes de gestión de refrigerantes

##### *Proyectos IDM*

11. El Comité Ejecutivo ha aprobado seis proyectos de inversión para IDM, por un valor que asciende a 18,091 millones de \$EUA. Solo hay un proyecto con su ejecución en curso para la eliminación de CFC en el sector de fabricación de IDM en Paquistán (PAK/ARS/56/INV/71), para el que se celebraron consultas con el sector con miras a terminar el visto bueno reglamentario de productos por parte de la *Drug Regulatory Authority* de Paquistán. La verificación final de las actividades se terminará en diciembre de 2016.

12. El Comité Ejecutivo puede estimar oportuno pedir al PNUD que presente un informe de situación a la 78ª reunión para supervisar la terminación de la eliminación de los CFC en la fabricación de los IDM en Paquistán.

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<sup>5</sup> Los proyectos en curso son todos aquellos aprobados por el Comité Ejecutivo y que se encontraban en ejecución al 31 de diciembre de 2015. Los indicadores clave de la marcha de las actividades incluyen: porcentaje de fondos desembolsados y porcentaje de proyectos para los que ha comenzado el desembolso de los fondos; financiación cuyo desembolso está previsto para finales de año (fondos desembolsados más los desembolsos estimados para 2015) como porcentaje de la financiación aprobada; la duración media de la demora media en la ejecución (terminación de proyecto con arreglo a la fecha propuesta y fecha actual de terminación); y la información facilitada en la columna de observaciones de la base de datos de informes sobre la marcha de las actividades.

### *Destrucción de desechos SAO*

13. El Comité Ejecutivo ha aprobado 11 proyectos de destrucción de desechos SAO, incluyendo seis actividades de preparación de proyecto y cinco proyectos de demostración en seis países<sup>6</sup>. Las seis actividades de preparación de proyecto y dos de los proyectos de demostración ya se han terminado. Las actividades de eliminación de SAO en curso siguen avanzando: la fecha de terminación prevista es enero de 2018 para Brasil (BRA/DES/72/DEM/305), abril de 2017 para Colombia (COL/DES/66/DEM/82), y octubre de 2016 para Ghana (GHA/DES/63/DEM/33). La cuestión de las actividades de eliminación en curso se aborda en el informe refundido de la marcha de las actividades.

### *Proyectos de enfriadores*

14. El Comité Ejecutivo aprobó cuatro proyectos de demostración de enfriadores por un monto de 2,98 millones de \$EUA. Se han terminado ya tres proyectos. El informe sobre la marcha de las actividades del último proyecto que queda, en Brasil, (BRA/REF/47/DEM/275) indica que se ha culminado un inventario definitivo de enfriadores, varios de ellos han sido reemplazados, y el resto de los enfriadores a reemplazar han sido identificados. La información sobre los ahorros energéticos se recogerán en el informe de terminación de proyecto. El proyecto se terminará y los saldos remanentes se reembolsarán en la última reunión de 2017 conforme a la decisión 71/10 c) i) b. En el informe refundido sobre la marcha de las actividades se pide un informe específico, dado la excesiva demora en la ejecución.

### *Planes de gestión de refrigerantes*

15. El Comité Ejecutivo aprobó 91 planes de gestión de refrigerantes en 47 países, incluidos 88 proyectos de asistencia técnica y tres de capacitación. En lo tocante a la asistencia técnica para un programa de incentivos y concienciación en las Maldivas (MDV/REF/38/TAS/05) aprobado en noviembre de 2002, el PNUD indicó que el proyecto se terminó en 2015; no obstante, sigue clasificado como en curso con tan solo un desembolso del 23 por ciento de los fondos aprobados.

16. El Comité Ejecutivo puede estimar oportuno tomar nota de asignar una fecha de terminación de diciembre de 2015 y pide que el saldo remanente de los fondos se reembolse a la 78ª reunión.

### Proyectos conexos a la eliminación de los HCFC

#### *Preparación de los planes de eliminación de gestión de los HCFC*

17. El Comité Ejecutivo aprobó 10,28 millones de \$EUA para 134 actividades de preparación de proyecto en 40 países que operan al amparo del artículo 5 a fin de abordar las medidas de control del consumo de los HCFC. La ejecución de estas actividades derivó en la aprobación de las etapas I y II de los planes de gestión de eliminación de los HCFC en 46 países que operan al amparo del artículo 5. Se han terminado ochenta y nueve actividades sin que se hayan identificado mayores problemas en 45 actividades restantes, salvo en el proyecto del sector de fabricación de equipos de refrigeración de Cuba (CUB/REF/58/PRP/42)<sup>7</sup>.

#### *Proyectos de demostración atinentes a los HCFC*

18. El Comité Ejecutivo aprobó diez proyectos de demostración conexos a los HCF, incluidos seis en el sector de espumas, tres en el sector de refrigeración y uno en el sector de disolventes. Se han

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<sup>6</sup> La India ha recibido financiación para la preparación del proyecto pero sin un proyecto de demostración.

<sup>7</sup> Esta cuestión se recoge en el documento UNEP/OzL.Pro/ExCom/77/39, en el que se ha tratado la cuestión de la disponibilidad de tecnologías alternativas.

terminado nueve proyectos de demostración. El resto de los proyectos en curso (demostración de HC-290 (propano) como refrigerante alternativo en la fabricación de equipos comerciales de climatización en Industrias Thermotar de Colombia (COL/REF/75/DEM/97)) sigue avanzando. Se han preparado el documento del proyecto, el mandato para el asesor internacional y la información técnica ya ha sido recopilada. La fecha de terminación prevista es el mes de junio de 2017.

*Planes de gestión de eliminación de los HCFC*

19. El Comité Ejecutivo aprobó: actividades del Plan de gestión de eliminación de los HCFC en 45 países por un monto que asciende a 198,67 millones de \$EUA, en principio, de los que 175,83 millones de \$EUA se han aprobado para actividades de tramos; y 22 proyectos de asistencia técnica individual, de los que cinco siguen aún en curso de ejecución.

20. El PNUD se encuentra ejecutando en total 76 tramos de planes de gestión de eliminación de los HCFC; 52 de estos tramos se aprobaron hace más de un año. De estos fondos, solo hubo desembolsos para 29 tramos. Se han identificado cuestiones relacionadas con el desembolso de fondos, adquisición y entrega de los equipos, y firma de los acuerdos en un cierto número de proyectos como se indica en el Cuadro 4.

**Cuadro 4. Actividades de planes de gestión de eliminación de HCFC en curso con cuestiones de ejecución pendientes**

País/Código de proyecto	Financiación más ajustes aprobados (\$EUA)	Fondos desembolsados (\$EUA)	% de fondos desembolsados	Saldo (\$EUA)	Cuestiones/Impedimentos
Barbados (BAR/PHA/69/INV/21)	50 000	0	0	50 000	Acuerdo sin firmar por el Gobierno y el PNUD.
Brasil (BRA/PHA/75/INV/312)	2 028 900	0	0	2 028 900	Acuerdo sin firmar por el Gobierno.
Brasil (BRA/PHA/75/TAS/313)	1 050 000	0	0	1 050 000	Acuerdo sin firmar por el Gobierno.
Chile (CHI/PHA/73/INV/184)	295 744	0	0	295 744	Bajo régimen de desembolso de los fondos aprobados.
China (CPR/PHA/71/INV/534)	8 495 000	8 424 373	99	70 627	Desembolso de costos operativos.
Ghana (GHA/PHA/67/INV/34)	200 000	130 000	65	70 000	Retraso en la entrega de los equipos.
Irán (República Islámica del) (IRA/PHA/74/INV/219)	250 430	52 638	21	197 792	Actividades de las unidades de gestión de proyecto sin indicar.
Nepal (NEP/PHA/66/INV/30)	42 000	8 000	19	34 000	Retraso en la entrega de los equipos.
Nigeria (NIR/PHA/71/INV/135)	503 829	232 842	46	270 987	Retraso para establecer el proceso de concesión de licencias para la planta experimental.
Santo Kitts y Nevis (STK/PHA/64/TAS/16)	40 000	0	0	40 000	Acuerdo sin firmar por el Gobierno.

21. El Comité Ejecutivo puede estimar oportuno pedir al PNUD que presente los informes de situación a la 78ª reunión sobre los planes de gestión de eliminación de los HCFC enunciados en el Cuadro 4 para supervisar / resolver las cuestiones indicadas en la última columna.

*Estudios sobre alternativas a las SAO*

22. El Comité Ejecutivo aprobó 12 estudios sobre alternativas a las SAO<sup>8</sup>. Se contrató al asesor y, en la mayoría de los casos, el estudio está en marcha para nueve países<sup>9</sup>. El asesor no ha sido contratado aún para los casos de Bangladesh, India, y la República de Moldavia.

23. La necesidad de terminar y presentar todos los estudios sobre alternativas a las SAO para enero de 2017 se aborda en el informe refundido sobre la marcha de las actividades.

Proyectos de FI

24. El Comité Ejecutivo aprobó 209 proyectos de FI en 25 países en los que la ejecución corrió a cargo del PNUD. Veintiséis proyectos siguen en curso en 22 países. El PNUD renovó 10 actividades de FI durante 2015. El organismo informó de que de los 13 proyectos de FI aprobados entre las reuniones 73<sup>a</sup> y 75<sup>a</sup> se ha desembolsado menos del 10 por ciento de los fondos, aunque no se han identificado mayores problemas.

Costos administrativos

25. De los 713 136 376 \$EUA netos aprobados para la ejecución de proyectos, 96 806 287 \$EUA han sido desembolsados para costos administrativos, de lo que resulta una razón general de costos administrativos del 13,6 por ciento desde 1991. En 2015 de los 34 196 623 \$EUA aprobados, 4 513 939 se habían desembolsado para sufragar costos administrativos de los que resulta una razón general de costos administrativos del 13,2 por ciento.

**Parte III. Recomendaciones de la Secretaría**

26. El Comité Ejecutivo puede estimar oportuno:

- a) Tomar nota:
  - i) Del informe sobre la marcha de las actividades del PNUD al 31 de diciembre de 2015 que se recoge en el documento UNEP/OzL.Pro/ExCom/77/13;
  - ii) De que el PNUD notificaría a la 78<sup>a</sup> reunión sobre un proyecto con demoras de ejecución y sobre 11 proyectos recomendados para informes adicionales de situación, como se recoge en los apéndices I y II, respectivamente, del anexo III del informe refundido sobre la marcha de las actividades (UNEP/OzL.Pro/ExCom/77/11); y
- b) Asignar una fecha de terminación de diciembre de 2015 y pedir que todo saldo remanente se reembolse a la 78<sup>a</sup> reunión para el plan de gestión de refrigerantes en las Maldivas (MDV/REF/38/TAS/05).

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<sup>8</sup> Los informes de los estudios sobre las SAO habrán de presentarse en enero de 2017 para que la Secretaría puede efectuar una análisis de sus resultados y presentarlo a la consideración del Comité Ejecutivo en su 78<sup>a</sup> reunión (decisión 74/53 h)).

<sup>9</sup> Costa Rica, Cuba, la República Dominicana, El Salvador, Irán (República Islámica del), Líbano, Panamá, Paraguay, y Perú.



Annex I

UNDP PROJECT IMPLEMENTATION BY COUNTRY

Country	Phased out in 2015	Percentage of planned phase-out achieved in 2015	Estimated funds disbursed in 2015 (US\$)	Funds disbursed in 2015 (US\$)	Percentage of funds disbursed over estimation in 2015	Percentage of planned projects completed in 2015
Angola	0.0		41,952	21,932	52	100
Argentina	0.0		124,798	148,281	119	
Armenia	0.0		49,529	42,845	87	100
Bahamas (the)	0.0		0	0		
Bahrain	0.0		0	0		
Bangladesh	0.0		90,179	55,811	62	
Barbados	0.0		20,000	0	0	
Belize	0.0		0	0		100
Benin	0.0		0	0		
Bhutan	0.0		296	0	0	
Bolivia (Plurinational State of)	0.0		0	0		
Botswana	0.0		0	0		
Brazil	18.2		4,375,029	4,492,612	103	
Brunei Darussalam	0.2		9,562	22,800	238	
Burkina Faso	0.0		0	0		
Burundi	0.0		0	0		
Cambodia	0.0		60,000	0	0	
Cabo Verde	0.0		0	0		
Central African Republic (the)	0.0		0	0		
Chad	0.0		0	0		
Chile	5.9		574,391	179,840	31	100
China	69.2	59	5,432,837	11,965,949	220	0
Colombia	2.9		743,414	679,154	91	50
Comoros (the)	0.0		0	0		
Congo (the)	0.0		0	0		
Costa Rica	0.0		127,048	144,382	114	
Cuba	5.4		627,389	908,984	145	
Democratic Republic of the Congo (the)	0.0		38,990	40,537	104	
Djibouti	0.0		0	0		
Dominica	0.0		0	0		
Dominican Republic (the)	0.4		217,412	423,589	195	
Ecuador	0.0		0	0		
Egypt	0.0		1,347,579	257,169	19	100
El Salvador	1.9		34,116	57,672	169	100
Eritrea	0.0		0	0		
Ethiopia	0.0		0	0		
Fiji	0.0		24,179	16,457	68	
Gabon	0.0		0	0		
Gambia (the)	0.0		0	0		
Georgia	0.6	100	88,831	110,725	125	100
Ghana	1.3		202,298	247,374	122	0
Grenada	0.0		0	0		

Country	Phased out in 2015	Percentage of planned phase-out achieved in 2015	Estimated funds disbursed in 2015 (US\$)	Funds disbursed in 2015 (US\$)	Percentage of funds disbursed over estimation in 2015	Percentage of planned projects completed in 2015
Guatemala	0.0		0	0		
Guinea	0.0		0	0		
Guinea-Bissau	0.0		0	0		
Guyana	0.0		2	0	0	
Haiti	0.0		70,420	87,268	124	
Honduras	0.0		0	0		
India	18.9	100	3,847,896	5,829,459	151	100
Indonesia	27.6		2,237,628	1,489,317	67	
Iran (Islamic Republic of)	0.0		550,585	693,360	126	100
Jamaica	0.0		58,444	79,295	136	100
Jordan	0.0		0	0		
Kenya	0.0		0	0		
Kuwait	0.0			0		
Kyrgyzstan	0.0		10,209	13,430	132	
Lao People's Democratic Republic (the)	0.0		0	0		
Lebanon	0.0		306,374	248,347	81	
Lesotho	0.0		0	0		
Liberia	0.0		0	0		
Libya	0.0		0	0		
Malawi	0.0		0	0		
Malaysia	0.0	0	1,072,642	1,044,819	97	0
Maldives	0.0		107,074	4,067	4	100
Mali	0.0		7,543	3,026	40	
Mauritania	0.0		0	0		
Mauritius	0.0		0	0		
Mexico	63.3		2,257,557	1,227,290	54	
Mongolia	0.0		0	0		
Morocco	0.0		0	0		
Mozambique	0.0		0	0		
Myanmar	0.0		0	0		
Nepal	0.1		16,800	8,000	48	
Nicaragua	0.0		0	0		
Niger (the)	0.0		0	0		
Nigeria	0.0		658,322	415,193	63	
Pakistan	0.0		251,750	95,683	38	
Panama	1.4	100	202,913	204,634	101	100
Paraguay	0.8	100	65,208	61,218	94	100
Peru	0.0		43,200	50,445	117	
Philippines (the)	0.0		0	0		
Republic of Moldova (the)	0.0		32,379	41,072	127	50
Rwanda	0.0		0	0		
Saint Kitts and Nevis	0.0		16,000	0	0	
Saint Vincent and the Grenadines	0.0		0	0		
Samoa	0.0		0	0		
Sao Tome and Principe	0.0		0	0		
Sierra Leone	0.0		0	0		

Country	Phased out in 2015	Percentage of planned phase-out achieved in 2015	Estimated funds disbursed in 2015 (US\$)	Funds disbursed in 2015 (US\$)	Percentage of funds disbursed over estimation in 2015	Percentage of planned projects completed in 2015
Somalia	0.0		0	0		
Sri Lanka	0.4	100	106,499	71,989	68	100
Suriname	0.0		0	0		
Swaziland	0.0		0	0		
Syria	0.0		0	0		
Thailand	0.0		0	0		
Timor-Leste	0.0		24,000	0	0	
Togo	0.0		0	0		
Trinidad and Tobago	2.5		273,438	342,372	125	100
Turkey	0.0		0	0		
Uganda	0.0		0	0		
United Republic of Tanzania (the)	0.0		0	0		
Uruguay	2.3		195,136	177,158	91	
Venezuela (Bolivarian Republic of)	0.0		264,380	15,019	6	
Viet Nam	0.0		0	0		
Yemen	0.0		0	0		
Zambia	0.0		0	0		
Zimbabwe	0.0		0	0		
Region: AFR	0.0		0	0		
Region: ASP	0.0		0	0		
Region: LAC	0.0		0	0		
Global	0.0		0	0		100
<b>Grand total</b>	<b>223.3</b>	<b>55</b>	<b>26,906,228</b>	<b>32,018,574</b>	<b>119</b>	<b>75</b>



Empowered lives.  
Resilient nations.

**Executive Committee of the Multilateral Fund  
for the Implementation of the Montreal Protocol**

# UNDP Annual Progress and Financial Report Narrative: 1991-2015

77th Meeting, 28 November – 2 December 2016, Montreal

## I. INTRODUCTION

The following narrative is based on a database of 2,391 projects funded by the Multilateral Fund, which contains basic information on their status of implementation as of 31 December 2015. However, some updates of activities which took place during the first quarters of 2016 are also included for information purposes. The database results in 11 summary tables which can be found at the end of this report, and which are referred to throughout this narrative.

As can be seen in the following sections, UNDP has disbursed US\$ 648,874,275 of the US\$ 713,136,381 worth of projects that were approved under the Multilateral Fund since its inception in 1991. These programmes were supposed to eliminate 67,743 ODP T/year, of which 67,076 (99%) were phased out as of 31 December 2015. This demonstrates UNDP's important role in the success of MLF's assistance towards the elimination of Ozone Depleting Substances.

As of the end of 2016, UNDP was active in 46 countries, of which 21 are low volume consuming (LVCs). The vast majority of ongoing projects are implemented using the National Implementation modality, providing countries with larger country ownership.

A large portion of the current ongoing programmes consist of HCFC phase-out management plans (HPMPs). For these, UNDP is the lead agency in 29 countries. In addition, UNDP also acts as the cooperating agency for 18 countries. In 2015, there were only two remaining HPMPs (Mauritania and South Sudan), which were a part of UNDP's business plan and which have not been submitted yet. However, the Stage I HPMP for South Sudan has been submitted for consideration of the Executive Committee at the 77<sup>th</sup> meeting. While actions are being taken to allow submission of the remaining Stage I HPMP for Mauritania, it should be noted that the reason why this HPMP cannot be submitted lies beyond UNDP's control.

There is a surge of workload for UNDP to meet the needs of so many HPMPs that are currently under implementation. This significant workload comes at a time that preparation of Stage II HPMPs is under way. Most countries, for which UNDP is the lead agency, have submitted their requests for Stage II HPMP full proposals in 2015/2016 and five countries (Angola, Bangladesh, Democratic Republic of Congo, Nigeria, and Peru) are expected to submit their requests in 2017 and beyond. Despite this challenging situation, UNDP, with its network of country offices, remains fully committed to meet the increased workload and ensure that countries receive the assistance needed to be in compliance with all requirements of the Montreal Protocol.

UNDP has also been at the forefront of technical assessments and demonstration projects for potentially cost-effective alternatives to HCFCs that minimize environmental impacts, particularly for those specific applications where such alternatives are not presently available and applicable. Pursuant to ExCom decision 72/40, UNDP has submitted seven funding requests for the preparation of projects to demonstrate climate-friendly and energy-efficient alternative technologies to HCFCs, and feasibility studies on district cooling. All these projects were approved in 2015.

Finally, pursuant to the decision of XXVI/9 of the Twenty-Sixth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, UNDP is also conducting twelve surveys of ODS alternatives, prioritizing the Foams, Refrigeration and Air Conditioning sectors in selected developing countries representing a balance of size and regional spread in order to: establish the market penetration of current commercially available alternatives, in terms of supply chain and costs, performance and environmental impact; and identify emerging alternatives, in terms of their expected market introduction and availability, performance and projected costs. ODS alternative surveys have been approved for Bangladesh,

Costa Rica, Cuba, Dominican Republic, El Salvador, India, Iran, Lebanon, Moldova, Panama, Paraguay, and Peru.

## **II. PROJECT APPROVALS AND DISBURSEMENTS**

### **A. Annual Summary Data (See table 1)**

Table 1: “Annual Summary” shows the important summary data on the number of project approvals, corresponding budgets, ODP, and disbursement figures. The table highlights that, cumulatively, as of 31 December 2015, UNDP had a total of 2,391 approved projects under the Multilateral Fund, of which 93 had been canceled or transferred. Of the 2,297 remaining projects, 2,121, or 92% have been completed. They are set to eliminate 67,072 ODP T/year, of which 66,440 ODP T (99%) have already been eliminated.

As of 31 December 2015, UNDP had received cumulative net project approvals of US\$ 713,136,381 (excluding support costs). Of these, UNDP, as of end-2015, had disbursed US\$ 648,874,275 excluding all obligations. This translates to 91% of approved funding. This is the same as last year’s disbursement rate of 91%. Furthermore, an additional US\$ 557,166 of obligations were outstanding as of end-December 2015, representing orders placed but final payments not yet made

### **B. Interest and Adjustments**

Interest income earned on MLF resources in 2015 is US\$ 505,346. Once the financial statements are submitted to the MLF Treasurer by the agreed deadline of 30 September, the difference between the provisional and final 2015 interest income can be adjusted against UNDP project approvals in 2016.

### **C. Summary Data By Type and Chemical [CPG, DEM, INS, INV, PRP, TAS, TRA] (See table 2)**

Table 2: Summary Data by Project Type presents an overview of the approvals by the type of project. It demonstrates that of the total amounts approved, 82.2% of the budgets were dedicated to investment projects, 5.2% to technical assistance projects, 5.7% to institutional strengthening and 3.5% to project preparation activities. The remaining 3.3% was dedicated to country programmes and demonstration/training activities.

## **III. PROJECT COMPLETIONS SINCE LAST REPORT**

### **A. ODP Phased Out from Completed Investment Projects**

A total of 46 investment projects phasing out 802.00 ODP tonnes, comprising 1 in aerosols, 1 in destruction, and 1 in phase-out plans were completed between 1 January and 31 December 2015. The corresponding ODP tonnes phased out for these projects are 111.80 in aerosols, 45.3 in destruction, and 40.2 in phase-out plans.

### **B. Non-Investment Project Completions Since The Last Report**

A total of 23 non-investment projects, comprising 12 institutional strengthening phases, and 11 other activities were completed between 1 Jan and 31 Dec 2015.

#### IV. GLOBAL AND REGIONAL PROJECT HIGHLIGHTS

- A. **Global Projects:** There is one on-going global programmes under implementation by UNDP:

GLO/SEV/71/TAS/322, the Core unit support (2016) programme approved at the 75th meeting of the Executive Committee, that covers the administrative costs of UNDP's Montreal Protocol Unit; and continuation of Core Unit support at a level that allows UNDP to provide the oversight, reporting and assistance needed to sustain the large programmer is critical.

- B. **Regional Projects:** There are no ongoing regional projects at this time.

#### V. PERFORMANCE INDICATORS

##### A. Results in 2015

Decision 41/93 of the Executive Committee approved the following indicators to allow for the evaluation of performance of implementing agencies, with the weightings indicated in the table below. Annex V of the report of the 73rd meeting of the Executive Committee contained UNDP's 2015 targets. One can see from the table below that UNDP fully met 5 out of 9 of its targets and that its score amounts to 91%.

Category of performance indicator	Item	Weight	UNDP's target for 2015	Result achieved in 2015	Score
1. Approval	Number of tranches approved vs. those planned*	10	36	29 → 81% (see annex 2, 1)	8.1
2. Approval	Number of projects/activities approved vs. those planned (including project preparation activities)**	10	19	39 → 100% (see annex 2, 2)	10.0
3. Implementation	Funds disbursed	15	\$19 million	\$32 million → 100% (see annex 2, 3)	15.0
4. Implementation	ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans	25	500.5	418.2 → 84% (see annex 2, 4)	20.1
5. Implementation	Project completion vs. planned in progress reports for all activities (excluding project preparation)	20	71	60 → 85% (see annex 2, 5)	16.9
6. Administrative	The extent to which projects are financially completed 12 months after project completion	10	70% of those due	32 finrevs out of 32 100% (see annex 2, 7)	10.0
7. Administrative	Timely submission of project completion reports vs. those agreed	5	70% of those due	100% achieved (1 individual PCR submitted out of 1 planned -- see annex 2, 8)	5.0
8. Administrative	Timely submission of progress reports and responses unless otherwise agreed	5	On-time	100% achieved (see annex 2, 9)	5.0
<b>TOTAL</b>		<b>100</b>			<b>90.1</b>

\*The target of an agency would be reduced if it could not submit a tranche owing to another cooperating or lead agency, if agreed by that agency.

\*\* Project preparation should not be assessed if the Executive Committee has not taken a decision on its funding.

##### B. Cumulative completed investment projects (Table 4)

As Table 4: Cumulative completed investment projects shows, a total of 1,134 investment projects have been completed, with a corresponding elimination of 61,052 ODP T. Of the US\$ 504,519,000 in their approved budgets in the sectors of Foam, Refrigeration, Phase-out Plan, Aerosol, Solvents, Fumigants, Halon, Process Agents, and Sterilants, 100% has already been disbursed. It took an average of 13 months from approval to first disbursement and 33 months from approval to completion. The overall cost-effectiveness of the projects to the Fund was \$7.56 /kg. A breakdown of this group of projects is given by region, sector, implementation modality, etc.

C. **Cumulative completed non-investment projects (Table 5)**

As Table 5 shows, UNDP has completed 513 non-investment projects excluding project preparation assistance. Of the US\$ 87,466,639 in their approved budgets, 100% has been disbursed. It took an average of 13 months from approval to first disbursement and 40 months from approval to completion. A breakdown of this group of projects is given by region, type, sector, implementation modality, etc.

D. **Cumulative ongoing investment projects (Table 6)**

As can be seen in Table 6, UNDP has 68 ongoing investment projects in the sectors of Phase-out Plans, Foam Aerosol, and Fumigants with corresponding budgets of US\$ 76,396,577. Of this amount, 40% has already been disbursed. It takes an average of 13 months from approval to first disbursement and an average of 41 months from approval to the estimated project completion. The overall cost-effectiveness of the projects to the Fund was \$65.37 /kg. A breakdown of this group of projects is given by region, sector, implementation modality, etc.

E. **Cumulative ongoing non-investment projects (Table 7)**

Table 7 shows that UNDP has 63 ongoing non-investment projects excluding project preparation assistance. Of the US\$ 15,646,280 in approved budgets, 16% has been disbursed. It takes an average of 13 months from approval to first disbursement and 32 months from approval to the estimated project completion. A breakdown of this group of projects is given by region, type, sector, implementation modality, etc.

## **VI. STATUS OF AGREEMENTS AND PROJECT PREPARATION BY COUNTRY**

A. **Agreements To Be Signed/Executed/Finalized**

Since UNDP has a standard legal agreement in place in each developing country that covers UNDP activities in that country, no additional legal agreement is required. There were no specific issues related to this in 2014.

B. **Project Preparation By Country, Approved Amount And Amount Disbursed (Table 8)**

Table 8: Project Preparation by Country, Approved Amount and Amount Disbursed, indicates active project preparation accounts. Of the ongoing 45 PRP projects listed with US\$ 3,207,000 in associated approvals, 26% has been disbursed.

## **VII. DESCRIPTION OF KEY ONGOING ACTIVITIES**

This section contains a narrative description of the following key ongoing activities:

- A. Technology demonstration projects
- B. ODS destruction demonstration projects
- C. Country Highlights

A. **Technology demonstration projects**

UNDP has been at the forefront of developing and implementing demonstration projects in various regions and sectors to assess relatively new technological developments for which little or no experience or data exists on technical performance and costs since 1996. The major objectives of such types of demonstrations



were to find alternative solutions and cost-saving methods to the Multilateral Fund for the Implementation of the Montreal Protocol in order to carry out HCFC-investment activities in the future years, bearing in mind the impact on the climate. The results of the demonstrations of emerging technologies in various industrial processes under local conditions in the following countries are described below:

#### A1. Demonstrations related to Stage I HPMPs

##### Brazil and Mexico

Pilot projects for the assessment of alternative technologies in PU Foam Applications were approved in Brazil and Mexico to develop, optimize and assess the use of methyl formate and methylal as blowing agents in PU applications. As a result of the demonstration projects, methyl formate was selected as an alternative technology in Egypt, Mexico, Nigeria, Brazil, Jamaica, Trinidad and Tobago, Cameroon, and some other countries. System houses in both Mexico and Brazil have adopted methylal technology in their HPMPs as a result of the successful pilot project.

##### China

###### *Foam Sector*

The Executive Committee approved a demonstration project to convert HCFC-22/HCFC-142b technology to CO<sub>2</sub> with methyl formate co-blowing technology in the manufacture of extruded polystyrene foam at Feininger (Nanjing) Energy Saving Technology Co. Ltd. It can be concluded that the CO<sub>2</sub> and methyl formate formulation tested can be applied to XPS manufacturing given that thermal conductivity, compression strength and limited oxygen index are acceptable. It was also determined that using methyl formate as the co-blowing agent of CO<sub>2</sub> had no significant influence on the processing process of XPS board.

###### *Refrigeration and Air Conditioning*

- Demonstration project for conversion from HCFC-22 to HFC-32 in the manufacture of commercial air-source chillers/heat pumps at Tsinghua Tong Fang Artificial Environment Co. Ltd.: The project is the first in China to adopt HFC-32 in place of HCFC-22 in the production of small-sized commercial air-source chillers/heat pumps. The demonstration project has directly led to the use of HFC-32 as a major alternative to HCFC-22 in the industrial and commercial refrigeration sector plan of stage I of the HPMP for China. Further conversion activities to HFC-32 technology have been approved for the HPMP in Indonesia, Algeria and Thailand.
- Demonstration project for conversion from HCFC-22 technology to ammonia/CO<sub>2</sub> technology in the manufacture of two-stage refrigeration systems for cold storage and freezing applications at Yantai Moon Group Co. Ltd: The capacity of the production line has been converted to use substitute refrigerants and is capable of manufacture the converted products. The project has passed the national acceptance verification. The converted products have been put into use by users in Yantai, Weihai and Dalian. The market has expressed interest. The technology route is innovative, the resulting product has significant advantages in terms of environment friendliness and energy efficiency, and the safety performance is greatly improved.

###### *Solvents*

The Executive Committee approved a demonstration project for conversion from HCFC-141b based technology to iso-paraffin and siloxane (KC-6) technology for cleaning in the manufacture of medical devices at Zhejiang Kindly Medical Devices Co. Ltd. The project carried out an assessment of more than 15 solvents widely used in the medical devices sector globally. The project tested the use of KC-6 as an

alternative to HCFC-141b. With necessary equipment modifications for needle assembly lines and silicification tooling cleaning line KC-3 presents itself as a viable alternative to HCFC-141b for cleaning in the manufacture of medical devices.

#### Colombia

The Executive Committee approved the assessment project for supercritical CO<sub>2</sub> technology in the manufacture of sprayed polyurethane rigid foams in Colombia. The project was designed to evaluate in developing countries the performance of super-critical CO<sub>2</sub>, a relatively new technology currently used in Japan for polyurethane (PU) spray rigid foam. Results from this project showed that supercritical CO<sub>2</sub> technology is a non-flammable, zero ODP and low GWP technology and it shouldn't create any additional industrial hygiene and safety hazards for the use as a replacement for HCFC-141b technology.

#### Egypt

Low cost options for the use of Hydrocarbons (HC) as foaming agents in the manufacture of PU Foam were considered as part of a demonstration project in Egypt. The objective of this project was to develop, optimize, and disseminate low-cost systems for the use of hydrocarbons in the manufacture of PU rigid insulation and integral skin foams. Both options that are emerging from the project—pre-blended cyclopentane systems and direct HC injection—have been selected for ODS phase-out projects in Brazil and Egypt. The findings of the demonstration project show that further mixing head optimization would be beneficial and might enhance the foam densities and reduce operational costs. This optimization was finalized at a system house in Egypt with the complementary report with additional findings submitted in 2015.

#### Nigeria

The hydrocarbon production demonstration project, being implemented at Pamaque Ltd as part of the HPMP in Nigeria (Stage 1), has been completed in its pilot phase in 2015, and the pilot plant commissioned on 19 November 2015. The establishment of the distillation and bottling unit has proved to be functional and safe. The commercial production is linked to private sector's further involvement and investment and work and consultations are still ongoing in this regard. Replication abroad is also being considered. A side event on the project was organized by UNDP and the Government of Nigeria at the 27th MOP in Dubai (1-5 November 2015) and a final report of this pilot demonstration project was submitted as an Annex to the request for the 5th tranche of the first stage of the HPMP, approved at the 75th ExCom Meeting.

#### Turkey

A pilot project validating the use of HFO-1234ze as Blowing Agent in the Manufacture of Extruded Polystyrene (XPS) Foam Boardstock in Turkey was designed to assess the use of HFO-1234ze in a developing country context. All planned production trials have been completed in 2011 and early 2012 and a final assessment was submitted to the 67th ExCom. The current findings show that there is a need for further trials as this will help obtain better assessment of the feasibility of the technology for developing countries. Unfortunately, funding for these additional activities was not approved so that no final conclusions about the technical feasibility of this technology could be arrived at.

### A2. Demonstrations related to Stage II HPMPs

Pursuant to ExCom decision 72/40, UNDP is preparing additional projects to demonstrate climate-friendly and energy-efficient alternative technologies to HCFCs, and feasibility studies on district cooling. UNDP has prepared and received approval for eight demonstration projects for the following seven countries:

- **China:** demonstrating ammonia semi-hermetic frequency convertible screw refrigeration compression unit in the industrial and commercial refrigeration industry;
- **Colombia:** HC-290 (propane) is being tested as an alternative refrigerant in commercial air-conditioning manufacturing; and validation of the use of hydrofluoro-olefins for discontinuous panels in Article 5 parties through the development of cost-effective formulations;
- **Costa Rica:** testing the application of an ammonia/carbon dioxide refrigeration system in replacement of HCFC-22 for the medium-sized producer and retail store of Premezclas Industriales S.A.
- **Dominican Republic:** feasibility study for district cooling in Punta Cana;
- **Egypt:** demonstrating low-cost options for the conversion to non-ODS technologies in polyurethane foams at very small users;
- **Kuwait:** demonstrating HCFC-free low-global warming potential technology performance in air-conditioning applications; and
- **Maldives:** testing HCFC-free low-global warming potential alternatives in refrigeration in fisheries sector are being tested.

#### **B. ODS destruction demonstration projects**

The UNDP Montreal Protocol & Chemicals Unit has been supporting countries to assist them to manage their stocks of ODS, which cannot be reused in a sound way. The potential for recovery, proper management and final disposal of such unwanted ODS and ODS containing appliances/equipment banked, have been proven as being possible in developed countries if the proper legislation and price incentives, as well as business opportunities, exist. However, the applicability of banks management schemes in developed countries needs to also be demonstrated in Article 5 countries. The Executive Committee has approved preparation activities for Brazil, Colombia, Cuba, Georgia, Ghana and India, to address ODS waste management leading to ODS destruction. Five such projects (Brazil, Colombia, Cuba, Georgia, and Ghana) have been submitted and approved by the Executive Committee in prior years. Progress is still ongoing in these projects and it is still too early to determine conclusive results at this stage. Nonetheless, an important conclusion from Ghana and Georgia is that for LVCs, in particular, the least cost option is export in combination with other hazardous waste (i.e. POPs), thus calling for integrated action with other chemical conventions.

#### **C. Country Highlights (January – December 2015)**

UNDP has been at the forefront of innovative solutions for countries to address their Montreal Protocol compliance obligations. UNDP's work has resulted in market transformation for the introduction of environment-friendly products and corresponding policy and technological advances and has brought to countries access to emerging technologies, reduced energy bills for consumers, fostered innovation, and created a more equitable market for greener products, allowing indigenous manufacturers to maintain competitiveness.

The next section showcases several prominent examples showing the impact of UNDP's support at the country level.

##### **Colombia**

The demonstration project for Industrias Thermotar Ltda. in Colombia was approved at the 75<sup>th</sup> meeting of the ExCom under the \$10 million funding window that was set up to demonstrate low GWP alternatives, especially in the RAC manufacturing sector. This is a demonstration project for the use of R-290 (propane) as an alternative refrigerant in the commercial air conditioning manufacturing with ranges

between 3.5 kW (1 ton of refrigeration) and 17.5 kW (5 tons of refrigeration), contributing to the elimination of HCFC-22 use in this RAC subsector. This project seeks to demonstrate the safe use of HC as a low GWP option for the manufacturing of commercial air-conditioning equipment that will be used in tropical areas of the Article 5 parties. Modifications in different production operations, such as refrigerant storage stations, HC feed lines, vacuum stations, HC charging station and the design modifications that will be undertaken as well as unit testing, will be considered. Moreover, training for operators and technical assistance to end users will be introduced to improve the complete framework of risk management. This project is expected to generate significant new knowledge about the safe use of HCs in the commercial AC sector in tropical climates in A5 countries.

### **Dominican Republic**

At the 74<sup>th</sup> meeting of the ExCom in May 2015, funds were approved for the business case/feasibility study for establishing a district cooling solution in the area owned by the Puntacana Foundation. The area includes two airport terminals, a shopping mall, 3 hotels and a new supermarket, and has the potential to be further expanded in the future. District Energy Venture (DEVCCO) from Sweden has been hired by UNDP to assist with the preparation of the business case study, and will hopefully trigger a large investment from the Puntacana Foundation for the benefit of the environment. A side event on district cooling was organized on the sidelines of the OEWG in April 2016 in Geneva.

### **Egypt**

As a part of the Stage 1 HPMP, the Government of Egypt and UNDP have successfully completed all approved individual PU foam programmes – 6 enterprises have transitioned to non-ODP/low GWP technologies such as methyl formate and hydrocarbons (HC). The results of previous low-cost HC demonstration programme were useful in addressing HCFC-141b consumption in PU foam companies with lower HCFC use, where otherwise HC technologies would not be implemented due to higher capital costs. At this moment, activities are focused on the system house level with polyol blending enterprises participating and initiating chemical formula preparation with methyl formate, methylal and other technologies to transfer them to downstream users. Uniform advances with system houses are the current objective to attempt a market-wide shift towards non-ODP/low GWP alternatives.

### **Kyrgyzstan**

In 2015, the Government of Kyrgyzstan and UNDP/UNEP jointly formulated an accelerated HCFC phase-out programme to achieve by 2020 a 97.5% reduction in the servicing sector with a service tail of 2.5% remaining until 2025. This HCFC reduction ahead of usual phase-out time was a decision of the Government based on its accession to the Customs Union's framework constituted by Art 2 group of countries in the former Soviet Union where HCFCs use is controlled by accelerated schedules and this recommendation was adopted by Kyrgyzstan for its own context. The Stage II HPMP programme was approved in May 2015 and is now in its first implementation phase on the ambitious path towards substantive HCFC phase-out by 2020. The programme had its inception round of workshops, and plans for an initial R&R tool procurement round to further strengthen the country's capability to address its dependence on HCFCs are underway.

### **India**

UNDP worked closely with India Government on the completion of systems house project. This project was a part of the HPMP and would assist the enterprises in developing HCFC free, low GWP formulations. During Q4 of 2015, detailed consultations were held with systems houses in the country who were beneficiaries to this project. During the discussion, besides completion of systems house project elements, UNDP shared experiences on how systems house phase-out is progressing in different countries in the region and also highlighted the importance of policies/regulations to eliminate use of

HCFC-141b in polyol systems produced and sold in the domestic market. There were various questions discussed relating to technology evolution, costs and assistance that could be offered by the large systems houses in the process of developing low GWP HCFC polyol systems. With full support from the Government, the larger systems house agreed to support technology transfer though the specifics need to be discussed individually with the respective systems houses on a case-by-case basis. There was also agreement on considering phase-out of HCFC-141b in new polyol systems during the period 2017-2019. The systems houses also agreed to this accelerated phase-out related consultations during HPMP Stage-II discussions that are currently underway.

### **Dubai side event on RAC technology adoption in India**

This was an important side event organized during the MOP in Dubai in November 2015. The side event was primarily designed to show actual experiences of Indian industry in adoption of HCFC free technologies in residential air-conditioning applications. The side event was organized in close consultation with the industry association in India, industrial enterprises producing R-290 and HFC-32 based air-conditioners and National Ozone Unit which supports technology adoption in the country. This side event was well attended by a range of stakeholders and had over 70 participants. Information on adoption of low GWP flammable technologies and their use in Indian market was shared by the respective manufacturers. The side event, which mainly presented the India case, provided an opportunity for other NOUs to understand the key parameters relating to the adoption of low GWP technologies and network with industry players so that the countries could move forward on adopting low GWP technologies.

## **VIII. ADMINISTRATIVE ISSUES (OPERATIONAL, POLICY, FINANCIAL, OTHER)**

### **A. Meetings Attended by UNDP in 2015**

<b>From</b>	<b>To</b>	<b>Location</b>	<b>Description</b>
26-Jan-15	2-Feb-15	India	Policy Support and Programme Oversight
8-Feb-15	14-Feb-15	Kyrgyzstan	Policy Support and Programme Oversight
9-Feb-15	13-Feb-15	Brazil	Policy Support and Programme Oversight
18-Feb-15	20-Feb-15	Cuba	Policy Support and Programme Oversight
25-Feb-15	27-Mar-15	Bahamas	Regional Network meeting for English speaking LAC
26-Feb-15	27-Feb-15	Canada	MPU Interagency coordination meeting
10-Feb-15	13-Feb-15	Ghana	Policy Support and Programme Oversight
15-Feb-15	19-Feb-15	Indonesia	Policy Support and Programme Oversight
23-Feb-15	27-Feb-15	Brunei	Policy Support and Programme Oversight
9-Mar-15	14-Mar-15	Korea	Joint Network Meeting of SA and SEAP
14-Mar-15	19-Mar-15	Angola	Policy Support and Programme Oversight
15-Mar-15	20-Mar-15	Iran	Policy Support and Programme Oversight
18-Mar-15	19-Mar-15	Brazil	Policy Support and Programme Oversight
22-Mar-15	27-Mar-15	Bahrain	Inter-agency & coordination meeting
22-Mar-15	28-Mar-15	China	Policy Support and Programme Oversight
11-Apr-15	14-Apr-15	Bangladesh	Policy Support and Programme Oversight
14-Apr-15	22-Apr-15	Egypt	Policy Support and Programme Oversight
20-Apr-15	24-Apr-15	Thailand	OEWG meeting and HFC workshop
16-May-15	23-May-15	Canada	74th Executive Committee Meeting
21-May-15	22-May-15	Peru	Policy Support and Programme Oversight

25-May-15	27-May-15	Mexico	Policy Support and Programme Oversight
1-Jun-15	3-Jun-15	Chile	Policy Support and Programme Oversight
8-Jun-15	12-Jun-15	Venezuela	Policy Support and Programme Oversight
11-Jun-15	15-Jun-15	Brussels	Resource Mobilization
18-Jun-15	19-Jun-15	Costa Rica	Policy Support and Programme Oversight
24-Jun-15	26-Jun-15	Colombia	Policy Support and Programme Oversight
30-Jun-15	2-Jul-15	Uruguay	Policy Support and Programme Oversight
30-Jun-15	1-Jul-15	Ghana	Policy Support and Programme Oversight
1-Jul-15	9-Jul-15	China	Policy Support and Programme Oversight
6-Jul-15	10-Jul-15	Moldova	Policy Support and Programme Oversight
10-Jul-15	11-Jul-15	India	Policy Support and Programme Oversight
22-Jul-15	26-Jul-15	France	36th OEWG Meeting
29-Jul-15	30-Jul-15	Brazil	Policy Support and Programme Oversight
29-Jul-15	6-Aug-15	Lebanon	Policy Support and Programme Oversight
17-Aug-15	21-Aug-15	Indonesia	Policy Support and Programme Oversight
24-Aug-15	25-Aug-15	Peru	Policy Support and Programme Oversight
31-Aug-15	1-Sep-15	Canada	Montreal Protocol interagency coordination meeting
8-Sep-15	10-Sep-15	Costa Rica	Policy Support and Programme Oversight
14-Sep-15	16-Sep-15	Dominican Republic	Policy Support and Programme Oversight
21-Sep-15	25-Sep-15	Brazil	Febrava and Conbrava conferences
13-Sep-15	19-Sep-15	China	Policy Support and Programme Oversight
26-Sep-15	28-Sep-15	Germany	Resource Mobilization
4-Oct-15	16-Oct-15	Delhi	Policy Support and Programme Oversight
13-Oct-15	15-Oct-15	Belarus	Policy Support and Programme Oversight
12-Oct-15	16-Oct-15	Senegal	Regional Ozone Network meeting for Africa
28-Oct-15	4-Nov-15	UAE	55th Implementation Committee, 36th OEWG and 27th Meeting of Parties on Montreal Protocol
8-Nov-15	14-Nov-15	Timor Leste	Policy Support and Programme Oversight
16-Nov-15	21-Nov-15	Nigeria	Policy Support and Programme Oversight
11-Nov-15	12-Nov-15	Colombia	Policy Support and Programme Oversight
16-Nov-15	21-Nov-15	Canada	75th Meeting of the Executive Committee and the Climate and Clean Air Coalition (CCAC) Workshop
23-Nov-15	27-Nov-15	Chile	Policy Support and Programme Oversight
23-Nov-15	25-Nov-15	Peru	Policy Support and Programme Oversight
27-Nov-15	30-Nov-15	Iran	Policy Support and Programme Oversight
30-Nov-15	4-Dec-15	Brunei	Policy Support and Programme Oversight
1-Dec-15	4-Dec-15	Malaysia	Policy Support and Programme Oversight

**B. Other Issues.**

There were no specific issues in 2015 that need to be addressed

## ANNEX 1: Tables related to the Performance Indicators

### 1. Performance Indicator 1: MYAs

Approvals for multi-year agreements are listed in the following table.

Country	Short Title
Angola	Stage I HPMP
Brazil	Stage I HPMP
Brazil	Stage II HPMP
Brunei Darussalam	Stage I HPMP
China	Stage I HPMP (Solvents)
China	Stage I HPMP (ICR)
Colombia	Stage II HPMP
Costa Rica	Stage I HPMP
Dominican R	Stage I HPMP
El Salvador	Stage I HPMP
Guyana	Stage II HPMP
India	Stage I HPMP
India	Accelerated CFC production phase-out (second tranche)
India	Accelerated CFC production phase-out (remaining of the second tranche)
India	CTC phase-out plan for the consumption and production sectors: 2009 annual programme
Iran	Stage I HPMP
Kyrgyzstan	Stage II HPMP
Lebanon	Stage I HPMP
Lebanon	Stage II HPMP
Malaysia	Stage I HPMP
Mexico	Stage I HPMP
Moldova	Stage I HPMP
Nepal	Stage I HPMP
Nigeria	Stage I HPMP
Panama	Stage I HPMP
Paraguay	Stage I HPMP
Peru	Stage I HPMP
Trin/Tobago	Stage I HPMP

### 2. Performance Indicator 2: Individual Projects

The number of individual projects approved in 2015 are listed in the following table.

Country	Short Title
Global	Core unit budget (2016)
Angola	Stage II HPMP Preparation
Bangladesh	Stage II HPMP Preparation
Bangladesh	Stage II HPMP Preparation (refrigeration and air-conditioning sector)
Bangladesh	Survey of ODS alternatives at the national level
Brazil	Several Ozone unit support
Chile	Several Ozone unit support
China	PRP for demo for ammonia semi-hermetic frequency convertible screw refrigeration system in industrial and commercial refr
Colombia	Several Ozone unit support
Colombia	Demonstration of HC-290 (propane) as an alternative refrigerant in commercial air-conditioning manufacturing at Industrias Thermotar Ltda
Costa Rica	Several Ozone unit support

Costa Rica	PRP for demo for transition of HCFC-22-based refrigerant unit to NH3 system in cold chambers
Costa Rica	ODS alternatives survey
Costa Rica	Verification report for HPMP Stage I
Cuba	Several Ozone unit support
Cuba	Survey of ODS alternatives at the national level
Dominican R	Feasibility study for district cooling in Punta Cana
Dominican R	Survey of ODS alternatives at the national level
Egypt	Stage II HPMP Prep
Egypt	Stage II HPMP Prep (foam)
Egypt	Stage II HPMP Prep (XPS)
El Salvador	ODS alternatives survey
Georgia	Several Ozone unit support
Georgia	Verification report for HPMP Stage I
India	PRP for demo for development and evaluation of spray foam polyol systems for buildings using HFOs as blowing agent
India	ODS alternatives survey
Indonesia	Several Ozone unit support
Iran	ODS alternatives survey
Kuwait	PRP for demo for low- GWP alternatives in high ambient temperature conditions in air-conditioning applications
Lebanon	ODS alternatives survey
Malaysia	Several Ozone unit support
Maldives	PRP for demo for low-GWP alternatives for HCFC phase-out in refrigeration applications in fishing industry
Moldova	Survey of ODS alternatives at the national level
Panama	Several Ozone unit support
Panama	ODS alternatives survey
Paraguay	Survey of ODS alternatives at the national level
Peru	Stage II HPMP Preparation
Peru	Survey of ODS alternatives at the national level
Uruguay	Several Ozone unit support

### 3. **Performance Indicator 3: Funds disbursed**

<b>2015 Disbursements</b>	32,005,542
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### 4. **Performance Indicator 4: 2015 ODS phase-out**

5.

MLF Number	Short Title	ODP to be Phased Out
ANG/PHA/75/INV/16	Stage I HPMP (third tranche)	1.6
BRA/PHA/74/INV/307	Stage I HPMP (4th tranche, foam)	32.9
BRA/PHA/75/INV/312	Stage II HPMP (first tranche) (foam sector)	40.8
BRA/PHA/75/INV/315	Stage I HPMP (fifth tranche) (foam sector)	54.5
BRA/PHA/75/TAS/313	Stage II HPMP (first tranche) (refrigeration servicing, regulatory actions and project monitoring)	4.4
BRU/PHA/74/INV/17	Stage I HPMP (2nd tranche, foam)	0
COL/PHA/75/INV/96	Stage II HPMP (first tranche) (refrigeration servicing sector)	6.9
COL/PHA/75/INV/98	Stage II HPMP (first tranche) (foam sector)	48.2
COL/PHA/75/TAS/91	Stage II HPMP (first tranche) (project management, monitoring and coordination)	0
COL/PHA/75/TAS/92	Stage II HPMP (first tranche) (technical assistance in policies formulation and implementation)	1.6
COL/PHA/75/TAS/94	Stage II HPMP (first tranche) (technical assistance for fire protection sector)	6.8
COS/PHA/74/INV/50	Stage I HPMP (3rd tranche)	1.4
CPR/PHA/75/INV/567	Stage I HPMP (fifth tranche) (industrial and commercial refrigeration and air conditioning sector plan)	38.2
CPR/PHA/75/INV/569	Stage I HPMP (third tranche) (solvent sector)	0



DOM/PHA/74/INV/58	Stage I HPMP (3rd tranche, servicing)	0
EGY/PHA/74/PRP/126	Stage II HPMP Prep	0
ELS/PHA/74/INV/31	Stage I HPMP (2nd tranche)	0
GUY/PHA/75/INV/28	Stage II HPMP (first tranche)	0.2
IND/PHA/75/INV/463	CTC phase-out plan for the consumption and production sectors: 2009 annual programme	0
IND/PHA/75/INV/464	Stage I HPMP (third tranche) (polyurethane foam sector plan and project monitoring)	47.8
IND/PRO/75/INV/462	Accelerated CFC production phase-out (second tranche)	0
IRA/PHA/74/INV/219	Stage I HPMP (4th tranche, ac and pmu)	0
KYR/PHA/74/INV/34	Stage II HPMP (1st tranche)	1.3
LEB/PHA/74/INV/84	Stage I HPMP (3rd tranche)	0
LEB/PHA/75/INV/85	Stage II HPMP (first tranche) (foam sector)	19.1
LEB/PHA/75/INV/86	Stage II HPMP (first tranche) (air conditioning sector)	5
LEB/PHA/75/INV/87	Stage II HPMP (first tranche) (refrigeration servicing sector)	5.7
LEB/PHA/75/TAS/88	Stage II HPMP (first tranche) (project management and coordination)	0
MAL/PHA/75/TAS/179	Stage I HPMP (third tranche) (refrigeration servicing, management and coordination)	9.5
MEX/PHA/75/INV/178	Stage I HPMP (fifth tranche) (foam sector plan for systems houses and local customers)	30
MOL/PHA/74/INV/31	Stage I HPMP (2nd tranche)	0
NEP/PHA/75/INV/35	Stage I HPMP (second tranche)	0.1
NIR/PHA/75/INV/143	Stage I HPMP (fifth tranche) (foam sector and refrigeration servicing)	56
PAN/PHA/74/INV/39	Stage I HPMP (3rd tranche)	0
PAR/PHA/74/INV/34	Stage I HPMP (2nd tranche)	2.1
PER/PHA/75/INV/48	Stage I HPMP (second tranche) (refrigeration servicing sector)	2.2
TRI/PHA/75/INV/33	Stage I HPMP (third tranche)	0
URU/PHA/75/INV/66	Stage I HPMP (fifth tranche)	1.9

## 6. Performance Indicator 5: Projects completed in 2015.

The following 60 projects were completed in 2015:

MLF Number	Actual Completion Date
ANG/PHA/65/INV/10	Dec-15
ANG/PHA/73/TAS/13	Dec-15
ARM/PHA/73/TAS/13	Nov-15
BHU/PHA/70/INV/19	Sep-15
BRA/PHA/64/INV/295	Jul-15
BRA/PHA/68/INV/298	Dec-15
BRU/PHA/66/INV/13	May-15
BZE/PHA/62/INV/26	Jan-15
CHI/PHA/63/INV/174	Nov-15
CHI/SEV/69/INS/177	Mar-15
COL/PHA/66/INV/81	Jan-15
COL/REF/47/DEM/65	Dec-15
COS/SEV/71/INS/49	Dec-15
CPR/PHA/64/INV/515	May-15
CPR/PHA/65/INV/519	May-15
CPR/PHA/68/INV/525	Dec-15

CPR/PHA/71/INV/537	Dec-15
CUB/DES/62/DEM/46	Oct-15
CUB/PHA/65/INV/49	Jul-15
DOM/PHA/65/INV/49	Dec-15
DOM/PHA/69/INV/53	Sep-15
DOM/PHA/69/INV/54	Sep-15
EGY/FOA/58/DEM/100	Dec-15
ELS/PHA/65/INV/29	Nov-15
ELS/PHA/65/INV/30	Nov-15
GEO/DES/69/DEM/33	Dec-15
GEO/PHA/63/INV/30	Mar-15
GEO/SEV/69/INS/34	Dec-15
GLO/SEV/73/TAS/324	Dec-15
IDS/PHA/64/INV/195	May-15
IDS/PHA/64/TAS/192	May-15
IDS/SEV/71/INS/201	Dec-15
IND/ARS/56/INV/423	Dec-15
IND/PHA/66/INV/441	May-15
IND/PHA/66/TAS/440	Nov-15
IND/SEV/66/INS/444	Dec-15
IRA/PHA/68/INV/208	Apr-15
IRA/PHA/72/INV/211	Dec-15
IRA/SEV/67/INS/206	Jun-15
JAM/PHA/64/INV/29	May-15
KAM/PHA/61/INV/24	Dec-15
KYR/PHA/72/INV/29	Oct-15
LEB/PHA/70/INV/78	Dec-15
LEB/SEV/68/INS/77	Sep-15
MAL/PHA/65/TAS/170	Apr-15
MAL/SEV/64/INS/167	Jun-15
MAL/SEV/70/INS/171	Dec-15
MDV/PHA/53/INV/15	May-15
MEX/PHA/68/INV/165	Dec-15
MOL/PHA/63/INV/25	Nov-15
PAK/SEV/68/INS/82	Sep-15
PAN/PHA/70/INV/34	Nov-15
PAN/PHA/74/INV/39	Dec-15
PAR/PHA/63/INV/29	Aug-15
SRL/PHA/62/INV/40	Dec-15
TRI/PHA/64/INV/27	Jun-15
TRI/SEV/68/INS/29	Dec-15
URU/PHA/71/INV/59	Dec-15
URU/PHA/73/INV/63	Apr-15
URU/SEV/71/INS/60	Dec-15

**7. Performance Indicator 7: Final Revisions**

Last year's database counted 46 projects operationally completed before 1 Jan 2015, which could have been financially completed in 2015. This year's database counts 32 projects for which a final revision was issued in 2015, which equals 70% of our target.

**8. Performance Indicator 8: PCRs**

100% achieved (2 multi-year PCRs and 1 individual PCR submitted out of 3 PCRs scheduled for submission in 2015).

**9. Performance Indicator 9**

Progress Report produced on 5 September 2016 as required.