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COMITÉ EJECUTIVO DEL FONDO MULTILATERAL
PARA LA APLICACIÓN DEL
PROTOCOLO DE MONTREAL
Cuadragésima Octava Reunión
Montreal, 3 al 7 de abril de 2006

PROPUESTAS DE PROYECTO: INDONESIA

Este documento contiene los comentarios y las recomendaciones de la Secretaría del Fondo sobre las siguientes propuestas de proyectos:

Eliminación

- Plan nacional de eliminación de CFC para Indonesia, con las solicitudes de financiamiento para los siguientes sectores:

• Eliminación del CFC residual en el sector de espumas	Banco Mundial
• Plan de eliminación de CFC en el sector de fabricación de equipos de refrigeración	PNUD
• Plan de eliminación de CFC en el sector de servicio y mantenimiento de equipos de refrigeración	PNUD
• Plan de eliminación de CFC en el sector de servicio y mantenimiento de equipos de aire acondicionado para vehículos	Banco Mundial

HOJA DE EVALUACIÓN DE PROYECTO - PROYECTOS PLURIANUALES

INDONESIA

TÍTULO DEL PROYECTO	ORGANISMO BILATERAL/ORGANISMO DE EJECUCIÓN
Plan nacional de eliminación de CFC	

TÍTULOS DE LOS SUBPROYECTOS

a)	Eliminación del CFC residual en el sector de espumas	Banco Mundial
b)	Plan de eliminación de CFC en el sector de fabricación de equipos de refrigeración	PNUD
c)	Plan de eliminación de CFC en el sector de servicio y mantenimiento de equipos de refrigeración	PNUD
d)	Plan de eliminación de CFC en el sector de servicio y mantenimiento de equipos de aire acondicionado para vehículos	Banco Mundial

ORGANISMO DE COORDINACIÓN NACIONAL:	Ministerio del Medio Ambiente

DATOS DE CONSUMO MÁS RECIENTE PARA SAO OBJETO DEL PROYECTO
A: DATOS DEL ARTÍCULO 7 (TONELADAS PAO, 2004, A FEBRERO DE 2006)

Anexo A, Grupo I, CFC	3 925,5	Anexo B, Grupo III, TCA	10,74
Anexo B, Grupo II, CTC	16,5		

B: DATOS SECTORIALES DEL PROGRAMA DE PAÍS (TONELADAS PAO, 2004, A DICIEMBRE DE 2005)

SAO	Espumas	Fabricación de equipos de refrigeración	Servicio y mantenimiento de equipos de refrigeración	Aerosoles	SAO	Solventes	
CFC-11	501,27	330,42	132,00	2,10	CFC-113	78,40	
CFC-12		426,09	1 748,19	684,20	CTC	16,5	
CFC-115		10,80	12,00		TCA	10,74	

Consumo de CFC remanente admisible para la financiación (toneladas PAO)	30 (para aerosoles: inhaladores de dosis medida)

PLAN ADMINISTRATIVO DEL AÑO EN CURSO: Financiación total: 2 355 200 $EUA; eliminación total: 458,8 ton. PAO.

Parámetro	2002	2003	2004	**2005**	2006	2007	2008	2009	2010	Total
Hito de cumplimiento				**4 166**		1 250			0	
Consumo anual máximo permitido de las sustancias (toneladas PAO)			5 546	**3 880**	2 331	1 122	30	30	0	N/C
Total de reducciones anuales de las sustancias (toneladas PAO)		779	1 666	**1 549**	1 209	1 092	0	30	0	6 325
Reducción anual con proyectos en curso (toneladas PAO)		559	976	**652**	300	100	0			2 587
Objetivo anual de eliminación de CFC en el **sector de fabricación de equipos de refrigeración – PNUD (**toneladas PAO)	0	0	300	**300**	300	241	0			1 141
Objetivo anual de eliminación de CFC en el **sector de servicio y mantenimiento de equipos de refrigeración - PNUD** (toneladas PAO)	0	0	200	**300**	322	250	0			1 072
Objetivo anual de eliminación de CFC en el **sector de equipos de aire acondicionado para vehículos - Banco Mundial** (toneladas PAO)	0	220	110	**110**	110	365	0			915
Objetivo anual de eliminación de CFC en el **sector de aerosoles – PNUD / Banco Mundial** (toneladas PAO)	0	0	80	**0**	0	70	0			150
Objetivo anual de eliminación de CFC en **el sector de espumas -- Banco Mundial** (toneladas PAO)	0	0	0	**130**	156	66	0			352
Objetivo anual de eliminación de CFC en el **sector de inhaladores de dosis medidas – Banco Mundial** (toneladas PAO)	0	0	0	**0**	0	0	0	30		30
Objetivo anual de eliminación de CFC en el sector de **solventes – ONUDI** (toneladas PAO)	0	0	0	**57**	21	0	0			78
Reducción anual mediante planes sectoriales (toneladas PAO)	0	220	690	**897**	909	992	0	30		3 738

Parámetro		2002	2003	2004	**2005**	2006	2007	2008	2009	2010	Total
Pagos anuales del financia-miento ($EUA)	**PNUD (fabricación de equipos de refrigeración)**	1 288 000	2 200 000	1 762 000	**750 000**	217 000	181 000	-	-	-	6 398 000
	Gastos de apoyo	111 920	194 000	156 900	**67 500**	19 530	16 290	-	-	-	566 140
	PNUD (servicio y mantenimiento de equipos de refrigeración)	2 196 758	1 805 987	500 000	**250 000**	159 555	-	-	-	-	4 912 300
	Gastos de apoyo	195 708	160 939	43 400	**21 300**	13 160	-	-	-	-	434 507
	Banco Mundial (equipos de aire acondicionado para vehículos)	1 369 800	1 347 300	1 347 300	**126 800**	125 800	-	-	-	-	4 317 000
	Gastos de apoyo	121 962	119 937	119 937	**10 092**	10 002	-	-	-	-	381 930
	Banco Mundial (aerosoles)			371 910							371 910
	Gastos de apoyo			27 893							27 893
	PNUD (aerosoles)			224 000							224 000
	Gastos de apoyo			13 440							13 440
	Banco Mundial (espumas)	0	0	1 725 000	**1 050 000**	147 564	35 000	-	-	-	2 957 564
	Gastos de apoyo	0	0	129 375	**78 750**	11 067	2 625	-	-	-	221 817
	Banco Mundial (inhaladores de dosis medidas)	*	*	*	*	*	*			*	*
	Gastos de apoyo	*	*	*	*	*	*			*	*
	ONUDI (solventes)			1 464 733							1 464 733
	Gastos de apoyo			108 974							108 974
Total de pagos anuales del financiamiento ($EUA)		4 854 558	5 353 287	7 394 943	**2 176 800**	649 919	216 000	-	-	-	20 645 507
Total de gastos de apoyo ($EUA)		429 590	474 876	599 919	**177 642**	53 759	18 915	-	-	-	1 754 701
Costos totales al Fondo Multilateral		5 284 148	5 828 163	7 994 862	**2 354 442**	703 678	234 915	-	-	-	22 400 208

SOLICITUD DE FINANCIACIÓN: Aprobación de 2 176 800 $EUA, más los gastos de apoyo del organismo de 177 642 $EUA.

RECOMENDACIÓN DE LA SECRETARÍA	Para consideración individual

DESCRIPCIÓN DEL PROYECTO

1. En calidad de organismo de ejecución principal y en nombre de la ONUDI y del Banco Mundial, como organismos de ejecución cooperantes, el PNUD presenta en nombre del Gobierno de Indonesia un informe sobre el programa anual de ejecución de 2004 (programa anual de ejecución), un programa anual de ejecución propuesto para 2006 y una solicitud para la liberación de la partida de financiamiento de 2 354 442 $EUA, correspondiente a 2005, para el plan nacional de eliminación de SAO en Indonesia.

2. En la 44ª Reunión el Comité Ejecutivo aprobó, en principio, un total de 20 645 507 $EUA para un plan nacional de eliminación (plan nacional de eliminación) para Indonesia, destinado a eliminar todo el consumo de CFC, CTC y TCA, a excepción de 30 toneladas PAO de CFC usadas para la fabricación de inhaladores de dosis medida, que se excluyeron del plan nacional de eliminación y que deberán tratarse en un proyecto separado.

3. El plan nacional de eliminación fusionó tres planes sectoriales individuales aprobados y en ejecución y agregó nuevas actividades en los sectores de aerosoles y solventes para terminar la eliminación. De este modo, la propuesta del PNUD se presenta en la forma de informes sobre actividades de cada sector pertinente, junto con un informe de verificación sobre el consumo total de CFC en Indonesia y sobre la eliminación lograda en cada sector. Según el Acuerdo aprobado, la presentación a consideración de la propuesta se programó para la 47ª Reunión. No obstante, resultó imposible presentar un informe de verificación para esa Reunión y el PNUD aplazó la fecha de presentación de la propuesta.

Informe sobre las actividades de 2004

4. El PNUD informó los detalles del avance de las actividades previstas durante 2004 para cada uno de los sectores, a saber:

- aerosoles (PNUD, Banco Mundial)
- espumas (PNUD, Banco Mundial)
- fabricación de equipos de refrigeración (PNUD)
- servicio y mantenimiento de equipos de refrigeración (PNUD)
- servicio y mantenimiento de equipos de aire acondicionado para vehículos (Banco Mundial)
- solventes (ONUDI)

5. Para los sectores que implican la conversión de empresas con proyectos terminados en 2004 (aerosoles, fabricación de equipos de refrigeración, espumas), el informe da el total de empresas convertidas y la eliminación resultante. En los dos subsectores de servicio y mantenimiento, el informe da una descripción detallada del avance en la instalación de los equipos de recuperación y reciclado, la capacitación y las medidas institucionales tomadas para apoyar las reducciones del consumo. Sin embargo, indica asimismo que un programa experimental de demostración de adaptación/reemplazo no avanzaba conforme al calendario, *inter alia*, debido a las altas expectativas de indemnización y problemas de programación. En todos los sectores el informe puso de relieve la asistencia técnica y las políticas aplicadas al nivel sectorial para ayudar la eliminación y fomentarla. Las actividades del sector de aerosoles, del Banco Mundial, y del sector de solventes,

de la ONUDI, se aprobaron sólo en la 47ª Reunión, en noviembre de 2004. Se suministran informes sobre las actividades emprendidas desde la aprobación, si bien casi todas tuvieron lugar en 2005.

6. El informe anual de 2004 tiene una parte exhaustiva sobre las medidas tomadas en 2004 y, más recientemente aún, para asistir al Gobierno de Indonesia a poner en vigor un sistema eficaz de control y supervisión de las importaciones. Después de haberse reunido en mayo de 2004 con los ministerios gubernamentales pertinentes, el PNUD y el Banco Mundial en agosto de 2004, prepararon una propuesta para un nuevo mecanismo regulador. Las reuniones a nivel ministerial tuvieron lugar en marzo de 2005 y en febrero de 2006, la última con la participación de la Secretaría del Fondo. En ambas ocasiones el Ministro de Medio Ambiente indicó la firme intención gubernamental de promulgar un decreto ministerial (a través del Ministro de Comercio) destinado a aplicar controles revisados para las importaciones. A la misión de febrero de 2006 se le volvió a asegurar que, efectivamente, se preparó un proyecto de reglamentación revisada sobre un sistema de otorgamiento de licencias y en un futuro muy próximo se promulgaría un decreto ministerial.

7. En la Tabla siguiente, Tabla 6 en el informe del PNUD, se indican los resultados de la eliminación en cada subsector correspondientes al año 2003.

Tabla 6: Resultados de la eliminación de CFC para 2004

Sector	**Organismo**	**Objetivo de eliminación convenido (toneladas métricas PAO)**	**Eliminación real alcanzada (toneladas métricas PAO)**
Sector de refrigeración (fabricación)	PNUD	300	323,79
Sector de refrigeración (servicio y mantenimiento)	PNUD	200	224,95
Sector de servicio y mantenimiento de equipos de aire acondicionado para vehículos	Banco Mundial	110	144,41
Sector de aerosoles (PT Yulia)	Banco Mundial/PNUD	80	223
Conclusión de proyectos individuales en curso	Banco Mundial	976	409,70
Conclusión de proyectos individuales en curso	ONUDI		55,10
TOTAL		**1 666**	**1380,95**

8. Los gastos y el saldo al final del año correspondiente a 2004 se presentan en las Tablas 7 a 9 del informe, reproducidas a continuación:

Tabla 7: Organismo de ejecución: PNUD

Sector	**Cantidad total aprobada ($EUA)**	**Cantidad desembolsada/asignada ($EUA)**	**Saldo no asignado/no desembolsado ($EUA)**	**Año de asignación del saldo no gastado ($EUA)**
Fabricación de equipos de refrigeración	5 250 000	2 918 420	2 331 580	2006
Servicio y mantenimiento de equipos de refrigeración	4 502 746	1 525 985	2 976 761	2006
Aerosoles (PT Yulia)	224 000	125 076	98 924	2006

Tabla 8: Organismo de ejecución: Banco Mundial

Sector	Cantidad total aprobada ($EUA)	Cantidad desembolsada/asignada ($EUA)	Saldo no asignado/no desembolsado ($EUA)	Año de asignación del saldo no gastado ($EUA)
Equipos de aire acondicionado para vehículos	4 064 400	3 265 187	799 213	2006
Espumas	371 910	6 800	365 110	2007
Aerosoles	1 725 000	792 303	932 697	2006

Tabla 9: Organismo de ejecución: ONUDI

Sector	Cantidad total aprobada ($EUA)	Cantidad desembolsada/asignada ($EUA)	Saldo no asignado/no desembolsado ($EUA)	Año de asignación del saldo no gastado ($EUA)
Solventes	1 464 733	614 486	850 247	$701 223 – 2006 $149 024 – 1er. Trimestre de 2007

Verificación de los límites y la eliminación de consumo en 2004

9. El PNUD indicó que una compañía de consultores de medio ambiente en Indonesia, PT Hatfindo Prima, subsidiaria de una compañía canadiense (Grupo Hatfield), ganó la licitación para la verificación independiente de desempeño con respecto a los objetivos y resultados de 2004, verificación que tendría lugar entre diciembre de 2005 y enero de 2006. La compañía debió:

- Establecer el nivel nacional de consumo de las sustancias y verificar que era inferior al objetivo de control para 2004 (5 546 toneladas métricas PAO);

- Establecer la eliminación a nivel nacional de las sustancias y verificar que durante 2004 hubiera sido 1 666 toneladas métricas PAO como mínimo, desglosado de la siguiente manera: 976 toneladas métricas PAO provenientes de la terminación de los proyectos en curso y 690 toneladas métricas PAO provenientes de las actividades iniciadas bajo los planes sectoriales de eliminación;

- Establecer la eliminación completa de las sustancias y verificar que corresponde a 976 toneladas métricas PAO como mínimo y que proviene de la terminación de los proyectos en curso, aprobados individualmente, durante 2004, para los diversos sectores;

- Establecer la eliminación completa de las sustancias y verificar que corresponde a 690 toneladas métricas PAO como mínimo y que proveniente de la terminación de subproyectos/actividades destinados a los beneficiarios que participaban en los planes sectoriales respectivos;

- Establecer las actividades de asistencia técnica de los programas anuales de ejecución de 2004 y verificar que se realizaron como correspondía, según lo descrito en el informe del programa anual de ejecución de 2004.

Consumo nacional de CFC

10. La metodología para la evaluación del nivel nacional total de consumo puede resumirse en los siguientes términos:

a) Para Indonesia, el consumo es igual a las importaciones. Las cifras de las importaciones obtenidas de los dos importadores principales y oficiosos (sin contar con toda la documentación) sumó 2 017 toneladas PAO. Las cifras de las importaciones del Gobierno basadas en las importaciones del único importador registrado sumaron 615,8 toneladas PAO. En base de la información de mercado, se evaluó que estos importadores controlaban el 95 por ciento del mercado, determinado en 2 123 toneladas PAO. Por lo tanto, el total de las importaciones registradas y sin registrar fue de 2 738,8 toneladas PAO;

b) Se obtuvieron los datos disponibles en las Dependencias Nacionales del Ozono de los países que exportaban SAO a Indonesia para compararlos con los datos de las importaciones. Los datos de los exportadores sumaron 2 505 toneladas PAO;

c) Las ventas totales domésticas de SAO, estimadas y pertinentes para 2004, obtenidas de los distribuidores y comerciantes, fueron utilizadas para hacer una doble verificación de la información disponible de a) y b) anteriores. Las ventas domésticas se obtuvieron de los registros de ventas de los cuatro distribuidores principales de Yakarta (dos de los cuales también eran importadores) y se determinó en 2 378 toneladas PAO;

d) El consumo estimado por empresa beneficiaria durante 2004 en los diversos sectores se utilizó para hacer una doble verificación de la información disponible de a) a c) anteriores. La eliminación de SAO en 2004 se dedujo del consumo básico total de todas las empresas que utilizaban SAO, identificadas en los proyectos individuales y planes sectoriales. La demanda restante se determinó en 3 755 toneladas PAO.

11. El total de consumo de CFC verificado para 2004 en Indonesia se resume en la Tabla 16 del informe del PNUD, que se reproduce a continuación.

Tabla 16: Resumen de cálculos de consumo de SAO en Indonesia para 2004

Total de importaciones de SAO, registradas y sin registrar, en Indonesia	2 738,78 toneladas métricas PAO
Total de exportaciones de SAO a Indonesia	2 505,00 toneladas métricas PAO
Total de ventas domésticas de SAO en Indonesia	2 616,00 toneladas métricas PAO
Demanda doméstica máxima para SAO en Indonesia	3 775,41 toneladas métricas PAO

12. El consumo nacional de CFC va de 2 505 toneladas métricas PAO a 3 775 toneladas métricas PAO. El PNUD indica que sería poco probable que al establecer estas cantidades el margen de error sobrepasase +15 por ciento. Por lo tanto, incluso después de aplicar este margen de error, la verificación de desempeño confirmó que el consumo nacional de las sustancias en Indonesia para 2004 está por debajo del consumo máximo permitido y convenido de 5 546 toneladas métricas PAO.

Verificación de la eliminación en el nivel sectorial

13. Para verificar la eliminación proveniente de los proyectos individuales terminados en 2004, se realizó un estudio de campo destinado a examinar una muestra representativa del 15 por ciento de empresas en diversas regiones y diversos subsectores. Los resultados, indicados en la Tabla 17 del PNUD, se reproducen a continuación y muestran que se logró una eliminación de 465 toneladas PAO, partiendo de un objetivo de 976 toneladas PAO. El bajo rendimiento se dio en el sector de espumas.

Tabla 17: Eliminación proveniente de la terminación de los proyectos individuales en curso

Sector	Consumo básico	SAO eliminadas	Objetivo de eliminación de proyectos en curso
Espumas – Udapana	16,00	16,00	776,00
Proyectos de espumas flexibles moldeadas	193,70	193,70	
Proyectos de espumas – ONUDI	55,10	55,10	
Aerosoles (PT Candi)	460,00	200,00	200,00
Eliminación total de proyectos en curso		**464,80**	**976,00**

14. Por otra parte, la eliminación proveniente de los planes sectoriales, sobrepasa los objetivos establecidos para 2004, según la Tabla 20 del PNUD, que se reproduce a continuación.

Tabla 20: Eliminación proveniente de las actividades bajo el plan sectorial

Sector	Consumo básico	Consumo de 2004 del estudio de campo	SAO eliminadas	Objetivos de eliminación
Fabricación de equipos de refrigeración	323,79	N/C	323,79	300,00
Servicio y mantenimiento de equipos de refrigeración	216,01	(41,06)	174,95	200,00
Servicio y mantenimiento de equipos de refrigeración – adaptación/ reemplazo			50,00	
Equipos de aire acondicionado para vehículos	217,17	(118,76)	98,41	110,00
Equipos de aire acondicionado para vehículos – retiro de vehículos			46,00	
Aerosoles	223,00	0	223,00	80,00
Total de eliminación de planes sectoriales			**916,15**	**690,00**

15. Para los subsectores de fabricación (equipos de refrigeración y aerosoles), la eliminación se determinó directamente a partir de las conversiones terminadas bajo el plan nacional de eliminación. Para los sectores de servicio y mantenimiento (servicio de equipos de refrigeración y de equipos de aire acondicionado para vehículos) se estableció la eliminación y se verificó mediante visitas a las plantas/estudio de campo de una selección al azar del 15 por ciento de las empresas beneficiarias que representaban por lo menos el 15 por ciento de consumo básico de SAO, situadas en centros importantes de Java Oriental, Java Central, Bali y Sumatra del Norte. El porcentaje de eliminación de consumo básico de las empresas se calculó mediante los registros de compras de CFC pertenecientes a cada una de las empresas visitadas. Luego, este porcentaje de eliminación se aplicó al consumo básico total de cada subsector para calcular una cantidad total estimada de eliminación. La eliminación adicional (50 toneladas PAO) se agregó al sector de servicio y

mantenimiento de equipos de refrigeración como reserva para los resultados de los programas de asistencia técnica. La eliminación adicional de 46 toneladas PAO se agregó al sector de equipos de aire acondicionado para vehículos como reserva para el retiro estimado de vehículos durante 2004 que usaban CFC en sus equipos de aire acondicionado.

Verificación de las actividades de asistencia técnica y de políticas/gestión

16. El PNUD informó que, mediante la inspección de los registros del Ministerio de Medio Ambiente y los organismos de ejecución pertinentes, el consultor independiente verificó que las actividades antedichas se habían realizado y completado de manera sustancial, según lo estipulado en el programa anual de ejecución de 2004.

Plan anual de ejecución para 2006

17. El PNUD presentó un plan anual de ejecución para el año en curso con el formato especificado en las directrices aprobadas. La eliminación propuesta en cada sector coincide con la eliminación indicada en el Acuerdo (y como aparece en la Tabla de la página 2 del presente documento). Asimismo se incluye una tabla exhaustiva que indica en detalle las actividades de asistencia técnica y de gestión propuestas. Por razones de espacio, no se reproduce en esta hoja de evaluación, pero aparece completa en la propuesta del PNUD (adjunta). Los presupuestos anuales para cada actividad sectorial y las solicitudes de financiamiento total (inclusive la duración de las actividades) aparecen en tablas pertinentes en el plan anual de ejecución, que se reproduce a continuación.

Tabla 6.1: Fabricación de equipos de refrigeración (PNUD)

Actividad	Gastos previstos ($EUA)
Dependencia de Coordinación y Gestión de Plan Sectorial	35 000
Asistencia técnica	100 000
Talleres y sensibilización	25 000
Equipos	450 000
Ensayos y capacitación	80 000
Desarrollo y aplicación de políticas	15 000
Verificación y certificación	5 000
Gastos imprevistos	40 000
TOTAL	**750 000**

Tabla 6.2: Servicio y mantenimiento de equipos de refrigeración (PNUD)

Actividad	Gastos previstos ($EUA)
Dependencia de Coordinación y Gestión de Plan Sectorial	26 000
Asistencia técnica	50 000
Talleres y sensibilización	50 000
Equipos	50 000
Capacitación	50 000
Desarrollo y aplicación de políticas	5 000
Verificación y certificación	3 000
Gastos imprevistos	16 000
TOTAL	**250 000**

Tabla 6.3: Servicio y mantenimiento de equipos de aire acondicionado para vehículos (Banco Mundial)

Actividad	Gastos previstos ($EUA)
Proyectos de inversión – equipos	80 000
Ensayos y puesta en marcha	20 000
Asistencia técnica, capacitación, talleres	26 800
TOTAL	**126 800**

Tabla 6.4: Espumas (Banco Mundial)

Actividad	Gastos previstos ($EUA)
Proyectos de inversión (equipos, ensayos y puesta en marcha)	1 000 000
Funcionamiento de la Dependencia de Coordinación y Gestión de Plan Sectorial	10 000
Asistencia técnica	10 000
Talleres y capacitación	17 000
Desarrollo y aplicación de políticas	10 000
Verificación	3 000
TOTAL	**1 050 000**

Tabla 7: Financiamiento y costos administrativos

Subproyecto	Organismo de ejecución	Partida ($EUA)	Gastos de apoyo ($EUA)	Total ($EUA)	Duración de las actividades
Sector de refrigeración (fabricación de equipos)	PNUD	750 000	67 500	817 500	2006 - 2007
Sector de refrigeración (mantenimiento)	PNUD	250 000	21 300	271 300	2006 - 2007
Sector de equipos de aire acondicionado para vehículos	Banco Mundial	126 800	10 092	136 892	2006 - 2007
Sector de espumas	Banco Mundial	1 050 000	78 750	1 128 750	2006 - 2007
Total		**2 176 800**	**177 642**	**2 354 442**	

COMENTARIOS Y RECOMENDACIONES DE LA SECRETARÍA

COMENTARIOS

18. Después de consolidar los planes sectoriales de Indonesia en un plan nacional de eliminación aprobado en la 44ª Reunión, en noviembre de 2004, el indicador primario de desempeño para los períodos de información de 2004 es el límite nacional de consumo de CFC para ese año: 5 546 toneladas PAO, según el Acuerdo aprobado. Por lo tanto, la Secretaría planteó al PNUD dos cuestiones clave: en primer lugar, si se dispone de suficiente información adicional sobre la metodología estadística usada para verificar el consumo de CFC de Indonesia, en 2004, como para apoyar una recomendación positiva de la verificación. En segundo lugar, si Indonesia tomó las medidas necesarias para implantar un sistema eficaz de control y supervisión de las importaciones, como para poder controlar e informar con precisión el consumo de 2006 y de los años siguientes.

19. Si bien estas dos cuestiones son independientes y tomando nota de que el consumo de 2005 (que se deberá verificar al final de este año) tampoco puede establecerse por otro método que no sea el de muestreo estadístico directo, el saber que Indonesia había superado sus problemas de control de las importaciones y estaba haciendo funcionar un sistema nuevo y estable proporcionaría un cierto contexto para la consideración del informe de verificación de 2004.

20. La Secretaría indicó al PNUD que, dependiendo de la necesidad de información y de las aclaraciones adicionales, según lo indicado a continuación, la verificación de 2004 podría recomendarse favorablemente. No obstante, la Secretaría tendía también a recomendar que se considerara la no liberación de ningún financiamiento adicional, aunque hubiera sido aprobado, hasta que se hubiese demostrado la introducción y la aplicación de un sistema eficaz de control y supervisión de las importaciones en Indonesia. Dentro de este contexto se presentan los comentarios detallados más abajo.

Verificación de desempeño

Consumo nacional

21. Los objetivos y la metodología, tal como se indican en la Sección 11.1 de la propuesta, parecen exhaustivos. Sin embargo, en ausencia de un sistema funcional de control de las importaciones, la metodología se apoya considerablemente en la correlación de la información obtenida de fuentes del mercado que no estaban abiertas a los procesos formales de una auditoría. La Secretaría pidió una aclaración con respecto a la validez de la suposición hecha en la evaluación, especialmente en lo referente a la participación en el mercado de las varias empresas principales que proporcionaron la información sobre las importaciones y las ventas, por ejemplo, para confirmar que los suministros de CFC de Cool Group y Sugi Group ascienden al 95 por ciento de las importaciones sin registrar. Asimismo se pidió una aclaración adicional con respecto a las bases para las cantidades de CFC exportadas a Indonesia y cómo explicar las zonas francas.

22. La información sobre ventas domésticas proveniente de los distribuidores parece ser un componente clave del proceso de doble verificación. La Secretaría solicitó explicaciones sobre las suposiciones de esta parte del informe de verificación. Por ejemplo, ¿cómo se sabe que cuatro distribuidores representan más del 90 por ciento del CFC vendido?, y ¿cómo se comprobó que las cifras de las ventas provistas por los distribuidores eran fiables y completas?

23. El PNUD informó que en Indonesia actualmente había sólo dos grupos importantes de importación sin registrar. Dichos grupos habían participado en varias interacciones anteriores y actuales con el Ministerio de Medio Ambiente y con los organismos de ejecución, y también habían ayudado a suministrar datos de las importaciones a nivel de usuario, en el momento de hacer los sondeos previos a la preparación de los diversos planes sectoriales. Así, excepto el único importador (registrado) autorizado, PT PPI, y unos pocos usuarios-importadores directos, era posible establecer con confianza, mediante las muchas interacciones y diálogos con el Ministerio de Medio Ambiente y los organismos de ejecución, especialmente el PNUD, que los dos principales importadores sin registrar representaban un 95 por ciento en relación al volumen de las importaciones totales de CFC en Indonesia. De acuerdo con lo anterior, se concluyó que los datos de estos dos importadores sin registrar: Cool Group y Sugi Group, eran suficientemente representativos de la verdadera situación de las importaciones en Indonesia.

24. Con respecto a las exportaciones de los países abastecedores, destinadas a corroborar las importaciones establecidas anteriormente, el Ministerio de Medio Ambiente obtuvo de las Dependencias Nacionales del Ozono de sus contrapartes, en los principales países exportadores de CFC (China, India y Corea del Sur), los datos sobre las exportaciones de CFC a Indonesia en 2004. A excepción de la Unión Europea, que no respondió a la solicitud de la Dependencia Nacional del Ozono, dichos países exportadores suministraron datos por escrito. En cuanto a Singapur, fue difícil obtener los datos sobre la zona franca porque no entran dentro de la capacidad del país controlar el comercio de una zona libre. En cambio, los datos sobre las exportaciones de la Unión Europea y de Singapur se basaron en las importaciones reales registradas por la aduana.

25. Con respecto a las ventas domésticas, el PNUD indicó que se conocen unos veinte distribuidores de CFC en Indonesia, pero sólo cuatro funcionan en gran escala, dos de los cuales son también los principales importadores no registrados a los que se hizo referencia anteriormente. Los cuatro distribuidores son muy conocidos en el mercado y dentro del Ministerio de Medio Ambiente, pues han estado participando en reuniones y talleres de interacción con la industria desde la preparación de los diversos planes sectoriales, en 2002. Las interacciones con estos cuatro distribuidores durante la verificación de desempeño de las actividades de 2003, el año pasado, también sirvieron para determinar que su participación en el mercado se estimaba en un 90 por ciento, cifra que se consideró fiable, tomando como base la experiencia de las numerosas reuniones y deliberaciones. La información obtenida de los usuarios de CFC, tanto en el sector de fabricación como en el de servicio y mantenimiento, indicó en varias ocasiones que sus fuentes de CFC eran uno de los cuatro distribuidores como mínimo. Estos cuatro distribuidores tienen por sí la solidez y la capacidad financiera para acumular la cantidad necesaria de CFC para abastecer al mercado mayorista. Por lo tanto, se consideró fiable muestrear los datos de estos cuatro distribuidores principales, para llegar a una estimación de la cantidad total de CFC que se vende nacionalmente. Las cifras de las ventas se obtuvieron a través de lecturas verbales de sus registros, ya que las empresas no estaban muy dispuestas a proporcionar la documentación. Las empresas Cool Group y Sugi Group también identificaron las cantidades de CFC vendidas a los otros dos distribuidores y las cantidades vendidas directamente al mercado, para evitar la doble contabilización.

26. El enfoque usado para verificar el consumo nacional en Indonesia es poco convencional porque los registros de las importaciones no son una herramienta útil. No obstante, dado que el límite superior de la gama de consumo estimado por el PNUD (2 505 toneladas PAO a 3 775 toneladas PAO) se encuentra todavía casi 30 por ciento por debajo del límite de consumo de 2004 especificado por los términos del Acuerdo, y dado el grado de convergencia de las cuatro estimaciones obtenidas, es posible deducir que se satisfizo el límite de consumo de 2004 fijado en el Acuerdo.

27. La Secretaría observa que el consumo de CFC de 2004 informado en virtud del Artículo 7 y en los datos del programa de país fue 3 960 toneladas PAO. Dado que el Gobierno de Indonesia habría estado funcionando con las mismas restricciones que el PNUD al intentar establecer el nivel de consumo, la variación entre los datos informados y los datos de la verificación parece comprensible.

Eliminación por sector y empresa en 2004

28. En un plan nacional de la eliminación, los datos del consumo nacional son el principal parámetro comprobable. No obstante, la eliminación de CFC alcanzada durante el período informado también es comprobable según los términos del Acuerdo y sirve como indicador del éxito logrado con las medidas tomadas bajo el plan nacional de eliminación. Asimismo proporciona medios para comprender las diferencias de consumo nacional que se dan de un año a otro. Por ejemplo, la eliminación total de CFC alcanzada en 2004 debería estar muy relacionada con la disminución de consumo nacional entre 2004 y 2005.

29. El objetivo total de eliminación de CFC para 2004 fue 976 toneladas PAO, procedentes de la terminación de los proyectos independientes y en curso, más otras 690 toneladas PAO procedentes de las actividades del plan nacional de eliminación. El informe del PNUD indicó una eliminación total de sólo 465 toneladas PAO provenientes de los proyectos en curso. Posteriormente, el PNUD aclaró que las reducciones totales previstas de 776 toneladas PAO, en el sector de espumas, y de 200 toneladas PAO, en el sector de aerosoles, remitían a las cifras aprobadas de consumo básico de CFC en las empresas de estos proyectos. El informe inicial no había incluido los datos básicos correctos, debido a varios cambios de estructura de los proyectos que tuvieron lugar desde las aprobaciones iniciales. Cuando se utilizaron los valores básicos correctos, inclusive la eliminación parcial de CFC de un proyecto general que concluyó en 2005, la eliminación total de CFC en el sector de espumas fue 627 toneladas PAO.

30. Además, en 2004, la eliminación real de CFC en el sector de aerosoles fue 400 toneladas, lo que no corresponde a las 200 toneladas indicadas originalmente, dado que la empresa en cuestión había terminado la eliminación en 2004, aun si ésta se había programado originalmente para 2004-2005. Sobre esta base, la eliminación definitiva de los proyectos en curso fue 1 027 toneladas PAO, sobrepasando así el objetivo fijado en el Acuerdo. La eliminación de CFC de los proyectos en curso había sido verificada por el consultor mediante la inspección de la documentación relativa a la terminación del proyecto.

31. Con respecto a la eliminación de CFC proveniente de las actividades bajo el plan nacional de eliminación, el informe del PNUD indicó un total de 916 toneladas PAO. De este total, 223 toneladas PAO se eliminaron en el sector de aerosoles, comparado con el objetivo del Acuerdo de 80 toneladas PAO. El PNUD aclaró que, basado en el consumo admisible restante, al preparar el plan nacional de eliminación, se asignaron sólo 80 toneladas PAO a este sector. Sin embargo, la gran empresa en cuestión había eliminado todo su consumo de CFC de 223 toneladas PAO, lo que en consecuencia se declaró en el informe.

32. Asimismo la Secretaría preguntó especialmente sobre la naturaleza representativa de la muestra de 15 por ciento usada para estimar la eliminación de CFC en el sector de servicio y mantenimiento, y sobre la verificación de las cantidades estimadas de 50 toneladas PAO y 46 toneladas PAO de CFC eliminadas, respectivamente, mediante el programa de incentivos de adaptación, y el retiro de vehículos equipados con aparatos de aire acondicionado que usan CFC. El PNUD indicó que los datos se habían proporcionado para demostrar que la muestra tenía una distribución geográfica representativa, considerando la ubicación de la infraestructura industrial en Indonesia, y el tamaño de la empresa se había considerado correctamente. Con respecto a las cantidades de eliminación de CFC específicas estimadas (arriba), el PNUD proporcionó información

aclaratoria para indicar que las estimaciones estaban bien fundadas. Sin embargo, no fue posible verificar estas dos cantidades.

33. La eliminación total de CFC informada para 2004, 1 943 toneladas PAO, según lo revisado por el PNUD sobrepasa el objetivo de 1 666 toneladas PAO. Si bien algunos aspectos de la verificación dan lugar a algunas dudas, parecería que la eliminación definitiva proveniente de las actividades terminadas en 2004 coincide con las actividades emprendidas y con los niveles considerados en el Acuerdo.

Informe sobre las actividades

34. En su informe el PNUD indicó, *inter alia*, que bajo el programa de recuperación y reciclado parece que la mayoría o todos los equipos destinados a los 188 establecimientos de servicio y mantenimiento se entregaron en 2004. No obstante lo anterior, la capacitación de técnicos no comenzó hasta la segunda mitad de 2005. Se pidió una aclaración con respecto al uso y la condición de los equipos que parecían haberse instalado en talleres de servicio y mantenimiento hasta 12 meses antes de la capacitación de técnicos. El PNUD respondió que los equipos se suministraron primero a las empresas grandes que estaban en condiciones de usarlos sin retraso, y que se brindó la capacitación operacional. El programa de capacitación de 2005 al que se hace referencia es el programa general de capacitación de técnicos, que no depende específicamente de la actividad de recuperación y reciclado.

35. La Secretaría también preguntó sobre el avance del programa de incentivos para usuarios finales, del cual se había informado que no avanzaba muy bien a fines de 2004. El PNUD aclaró que los usuarios finales seleccionados estaban haciendo ahora el cambio a equipos sin CFC y que las 50 toneladas de reducciones indicadas en este subsector, en 2004, no provenían del programa de incentivos directamente, sino de unos pocos usuarios grandes que sustituyeron individualmente sus sistemas de refrigeración que usan CFC.

Marco regulador

36. En una Reunión de alto nivel en Yakarta, en febrero de 2006, los funcionarios indonesios del medio ambiente, inclusive el Ministro, informaron a los representantes de la Secretaría y de los cuatro organismos de ejecución su determinación a superar los desafíos actuales del control de las importaciones mediante la introducción de medidas reglamentarias pertinentes. Dentro de este contexto, la Secretaría indicó al PNUD que en la práctica el avance parecía lento y que el trabajo restante no era simplemente administrativo, sino que implicaba acuerdos sobre políticas que estaban más allá del control del Ministerio del Medio Ambiente. El PNUD informó posteriormente que se había lanzado un proyecto de nuevas reglamentaciones y que estaba en la etapa final de consideración. Las reglamentaciones permitirían el registro de importadores hasta el 31 de diciembre de 2007, última fecha para la eliminación de CFC de Indonesia. El Ministerio del Medio Ambiente fijaría las cuotas de las importaciones.

37. El PNUD agregó que si bien es correcto que no hubiera habido nuevos resultados en estos últimos meses y que la revisión de las reglamentaciones de SAO todavía no se había realizado, los esfuerzos y las actividades emprendidos por el Ministerio de Medio Ambiente y los organismos de

ejecución deberían ser reconocidos como pasos importantes y que hay firmes indicaciones de que tales esfuerzos llevarían muy pronto a la revisión real de la reglamentación existente.

38. Al reconocer que Indonesia por sí misma inició y acordó un objetivo muy ambicioso para la eliminación completa antes de diciembre de 2007, dos años antes del calendario del Protocolo de Montreal, el PNUD sugirió que el retener los fondos obstaculizaría o inclusive pondría en peligro el éxito real alcanzado, y pidió que las dos cuestiones, financiamiento del proyecto y reglamentaciones sobre las importaciones, se juzguen de manera independiente.

39. La adopción y la aplicación de controles eficaces de las importaciones serán importantes, inclusive esenciales en el logro de la eliminación total de CFC en Indonesia para fines de 2007. Además, la verificación de los niveles nacionales de consumo presentará desafíos considerables si no existen esos controles de las importaciones. La razón principal por la que la Secretaría puede informar que la verificación de consumo de 2004 es satisfactoria es que el objetivo de control de 2004, fijado en el Acuerdo en 5 546 toneladas PAO, sobrepasa mucho los niveles estimados de consumo nacional de 2 505– 3 775 toneladas PAO. Es posible que esto no ocurra en 2005, año para el cual el nivel de reducción del Protocolo del 50 por ciento es 4 166 toneladas PAO. Asimismo la verificación en 2005 deberá hacerse sin la ventaja contar con los controles eficaces de las importaciones. Si el régimen de control de las importaciones se establece sin retrasos, será posible utilizar las reglamentaciones para controlar el consumo del nacional de 2006 y ayudar a su verificación en 2007. La razón de considerar la retención de la partida de financiamiento aprobada de 2006 sería la de proporcionar un incentivo directo a la rápida adopción de los nuevos proyectos de reglamentaciones.

40. Con respecto al efecto en la ejecución, las Tablas 7 a 9, reproducidas anteriormente (párrafo 8) indican que el único sector que se verá afectado por el retraso será probablemente el sector de espumas del Banco Mundial, para el cual la partida de financiamiento de 2006 es de 1 millón $EUA aproximadamente. No obstante, incluso en este sector, el informe del PNUD indica un saldo no utilizado de 365 110 $EUA.

Programa anual de ejecución de 2006

41. La Secretaría no tiene ningún comentario sobre el programa anual de ejecución de 2006 que podría considerarse para aprobación.

RECOMENDACIONES

42. El Comité Ejecutivo puede querer considerar:

a) La aprobación del programa anual de ejecución de 2006 para el plan de eliminación nacional para Indonesia;

b) La aprobación del financiamiento de 2 176 800 $EUA, más los gastos de apoyo totales de 177 642 $EUA para su ejecución, a condición de que no se libere el financiamiento hasta que el Gobierno de Indonesia haya informado oficialmente, a través del PNUD, en calidad de organismo de ejecución principal, a la Secretaría del Fondo que las nuevas reglamentaciones de control de las importaciones de SAO ya han sido adoptadas y están vigentes.

INDONESIA

NATIONAL PHASE-OUT PLAN FOR ANNEX-A GROUP-I AND ANNEX-B GROUP-II & III SUBSTANCES

REPORT ON 2004 ANNUAL IMPLEMENTATION PROGRAMME, SUBMISSION OF 2006 ANNUAL IMPLEMENTATION PROGRAMME AND REQUEST FOR RELEASE OF 2005 FUNDING TRANCHES

Prepared Jointly By:

KEMENTRIAN LINGKUNGAN HIDUP (KLH), GOVERNMENT OF INDONESIA
UNITED NATIONS DEVELOPMENT PROGTAMME
WORLD BANK
UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

6 February 2006

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL ON SUBSTANCES THAT DEPLETE THE OZONE LAYER

PROJECT COVER SHEET - MULTI-YEAR PROJECTS

COUNTRY:	INDONESIA

PROJECT TITLE:	**BILATERAL/IMPLEMENTING AGENCIES**
Phase-out of Annex-A, Group-I and Annex-B, Group-II and III substances in Indonesia	UNDP – Lead Implementing Agency World Bank – Cooperating Agency UNIDO – Cooperating Agency

SUB-PROJECT TITLE (S):	
Phase-out Plan Implementation and Coordination:	UNDP
Phase-out in Refrigeration (Manufacturing) Sector:	UNDP
Phase-out Management in the Refrigeration (Servicing) Sector:	UNDP
Phase-out in the MAC Sector	World Bank
Phase-out in the Aerosols Sector:	World Bank UNDP
Phase-out in the Foams Sector:	World Bank
Phase-out in the MDI Sector:	World Bank
Phase-out in the Solvents Sector:	UNIDO

NATIONAL COORDINATING AGENCY:	Kementrian Lingkungan Hidup (KLH)

LATEST REPORTED CONSUMPTON DATA FOR ODS ADDRESSED IN THE PROJECT:

A. Article-7 Data (ODP Tonnes, 2004, as of 2005):

Annex-A Group-I Substances (CFCs) ODP Tonnes	3,960.27	Annex-B Group-III Substances (TCA) ODP Tonnes	107.40
Annex-B Group-II Substances (CTC) ODP Tonnes	15.00	Annex-E Group-I Substances (MeBr) ODP Tonnes	63.00

B. Country Programme Sectoral Data (ODP Tonnes for 2004, as of 2005):

Substance	Aerosols	Foams	Refrigeration	Substance	Solvents	Process Agent	Fumigant
CFC-11	2.10	501.27	462.42	**CTC**	15.00	0.00	0.00
CFC-12	684.20	0.00	2,174.28	**TCA**	107.40	0.0	0.00
CFC-115	0.00	0.00	38.00	**MeBr**	0.00	0.00	63.00

CFC CONSUMPTION REMAINING ELIGIBLE FOR FUNDING (ODP Tonnes) :	**30 (for MDI)**

CURRENT YEAR BUSINESS PLAN: Funding level US$ million, Total Phase-out ODP Tonnes

PROJECT DATA

See Agreement table appended in next page.

FUNDING REQUEST:

Approval of funding for the next tranches (2005) is requested as below:

Sub-project	Implementing Agency	Tranche (US$)	Support Costs (US$)	Total (US$)
Refrigeration (Manufacturing) Sector	UNDP	750,000	67,500	817,500
Refrigeration (Servicing) Sector	UNDP	250,000	21,300	271,300
MAC Sector	World Bank	126,800	10,092	136,892
Aerosols Sector	World Bank	0	0	0
	UNDP	0	0	0
Foams Sector	World Bank	1,050,000	78,750	1,128,750
MDI Sector	World Bank	0	0	0
Solvents Sector	UNIDO	0	0	0
Total		**2,176,800**	**177,642**	**2,354,442**

Prepared by: UNDP in consultation with KLH and Cooperating Agencies **Date:** February 2006

PROJECT COVER SHEET – CONT'D)

PROJECT DATA		2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Compliance Milestone					**4,166**		**1,250**			**0**	
Maximum Allowable Annual Consumption of the Substances (ODP tonnes)				5,546	3,880	2,331	1,122	30	30	0	N/A
Total Annual Reductions of Substances (ODP tonnes)			**779**	**1,666**	**1,549**	**1,209**	**1,092**	**0**	**30**	**0**	**6,325**
Annual Reduction from on-going projects (ODP tonnes)			559	976	652	300	100	0			2,587
Annual CFC phase-out target in the **Refrigeration (Mfg) Sector** – **UNDP** (ODP tonnes)		0	0	300	300	300	241	0			1,141
Annual CFC phase-out target in the **Refrigeration (Servicing) Sector - UNDP** (ODP tonnes)		0	0	200	300	322	250	0			1,072
Annual CFC phase-out target in the **MAC Sector – World Bank** (ODP tonnes)		0	220	110	110	110	365	0			915
Annual CFC phase-out target in the **Aerosols Sector – World Bank** (ODP tonnes)		0	0	80	0	0	70	0			150
Annual CFC phase-out target in the **Foams Sector – World Bank** (ODP tonnes)		0	0	0	130	156	66	0			352
Annual CFC phase-out target in the **MDI Sector – World Bank** (ODP tonnes)		0	0	0	0	0	0	0	30		30
Annual CFC phase-out target in the **Solvent Sector – UNIDO** (ODP tonnes) +		0	0	0	57	21	0	0			78
Annual Reduction through Sector Plans (ODP tonnes)		**0**	**220**	**690**	**897**	**909**	**992**	**0**	**30**		**3,738**
Annual Funding Instalments (US$)	**UNDP Refrigeration (Mfg)**	**1,288,000**	**2,200,000**	**1,762,000**	**750,000**	**217,000**	**181,000**	-	-	-	**6,398,000**
	Support Cost	111,920	194,000	156,900	67,500	19,530	16,290	-	-	-	566,140
	UNDP-Refrigeration (Svg)	**2,196,758**	**1,805,987**	**500,000**	**250,000**	**159,555**	-	-	-	-	**4,912,300**
	Support Cost	195,708	160,939	43,400	21,300	13,160	-	-	-	-	434,507
	World Bank (MAC)	**1,369,800**	**1,347,300**	**1,347,300**	**126,800**	**125,800**	-	-	-	-	**4,317,000**
	Support Cost	121,962	119,937	119,937	10,092	10,002	-	-	-	-	381,930
	World Bank (Aerosols)			**371,910**							**371,910**
	Support Cost			27,893							27,893
	UNDP (Aerosols)			**224,000**							**224,000**
	Support Cost			13,440							13,440
	World Bank (Foam)	**0**	**0**	**1,725,000**	**1,050,000**	**147,564**	**35,000**	-	-	-	**2,957,564**
	Support Cost	0	0	129,375	78,750	11,067	2,625	-	-	-	221,817
	World Bank (MDI)	*	*	*	*	*	*			*	*
	Support Cost	*	*	*	*	*	*			*	*
	UNIDO (Solvent)			**1,464,733**							**1,464,733**
	Support Cost			108,974							108,974
Total Annual Funding Instalment (US$)		**4,854,558**	**5,353,287**	**7,394,943**	**2,176,800**	**649,919**	**216,000**	-	-	-	**20,645,507**
Total Support Costs (US$)		429,590	474,876	599,919	177,642	53,759	18,915	-	-	-	1,754,701
Total Costs to MLF		**5,284,148**	**5,828,163**	**7,994,862**	**2,354,442**	**703,678**	**234,915**	-	-	-	**22,400,208**

+ Phase out targets in the Solvent Sector (UNIDO) also include 5.6 ODP tonnes of 1,1,1 trichloroethane (TCA) and 16.5 ODP tonnes of carbon tetrachloride (CTC) **NOT** reflected in the above table. For TCA, 3.0 and 2.6 ODP tonnes will be phased out in 2005 and 2006 respectively. For CTC, 16.5 ODP tonnes will be phased out in 2005. There will be no further consumption of CTC and TCA after 2005 and 2006 respectively.

* Funding for the MDI Sector is not considered in this Agreement and the country reserves the right to request funding for the MDI sector in the future in accordance with the prevailing eligibility and funding criteria of the Multilateral Fund, as stipulated in paragraph 2 of the Agreement.

Phase-out of Annex-A Group-I and Annex-B Group –II & III Substances

Report on 2004 Annual Implementation Programme

1. Background

The agreement between Government of Indonesia and the Executive Committee of the Multilateral Fund (Document UNEP/OzL.Pro/ExCom/44/73, Annex-XI) covering the total phase-out of Annex-A Group-I and Annex-B Group II & III substances in Indonesia, includes and supersedes the previous agreements covering the Refrigeration and Foam Sectors. The agreement was approved at the 44th Meeting of the Executive Committee of the Multilateral Fund, at a total funding level of US$ 20,645,507. The breakdown of the approved overall funding, the disbursement schedule and annual CFC consumption and phase-out control targets, reproduced from the agreement is as below:

PROJECT DATA		**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Total**
Compliance Milestone					**4,166**		**1,250**			**0**	
Maximum Allowable Annual Consumption of the Substances (ODP tonnes)				5,546	3,880	2,331	1,122	30	30	0	N/A
Total Annual Reductions of Substances (ODP tonnes)			**779**	**1,666**	**1,549**	**1,209**	**1,092**	**0**	**30**	**0**	**6,325**
Annual Reduction from on-going projects (ODP tonnes)			559	976	652	300	100	0			2,587
Annual CFC phase-out target in the **Refrigeration (Mfg) Sector – UNDP** (ODP tonnes)		0	0	300	300	300	241	0			1,141
Annual CFC phase-out target in the **Refrigeration (Servicing) Sector - UNDP** (ODP tonnes)		0	0	200	300	322	250	0			1,072
Annual CFC phase-out target in the **MAC Sector – World Bank** (ODP tonnes)		0	220	110	110	110	365	0			915
Annual CFC phase-out target in the **Aerosols Sector – World Bank** (ODP tonnes)		0	0	80	0	0	70	0			150
Annual CFC phase-out target in the **Foams Sector – World Bank** (ODP tonnes)		0	0	0	130	156	66	0			352
Annual CFC phase-out target in the **MDI Sector – World Bank** (ODP tonnes)		0	0	0	0	0	0	0	30		30
Annual CFC phase-out target in the **Solvent Sector – UNIDO** (ODP tonnes) +		0	0	0	57	21	0	0			78
Annual Reduction through Sector Plans (ODP tonnes)		**0**	**220**	**690**	**897**	**909**	**992**	**0**	**30**		**3,738**
Annual Funding Instalments (US$)	**UNDP Refrigeration (Mfg)**	**1,288,000**	**2,200,000**	**1,762,000**	**750,000**	**217,000**	**181,000**	**-**	**-**	**-**	**6,398,000**
	Support Cost	111,920	194,000	156,900	67,500	19,530	16,290	-	-	-	566,140
	UNDP-Refrigeration (Svg)	**2,196,758**	**1,805,987**	**500,000**	**250,000**	**159,555**	**-**	**-**	**-**	**-**	**4,912,300**
	Support Cost	195,708	160,939	43,400	21,300	13,160	-	-	-	-	434,507
	World Bank (MAC)	**1,369,800**	**1,347,300**	**1,347,300**	**126,800**	**125,800**	**-**	**-**	**-**	**-**	**4,317,000**
	Support Cost	121,962	119,937	119,937	10,092	10,002	-	-	-	-	381,930
	World Bank (Aerosols)			**371,910**							**371,910**
	Support Cost			27,893							27,893
	UNDP (Aerosols)			**224,000**							**224,000**
	Support Cost			13,440							13,440
	World Bank (Foam)	**0**	**0**	**1,725,000**	**1,050,000**	**147,564**	**35,000**	**-**	**-**	**-**	**2,957,564**
	Support Cost	0	0	129,375	78,750	11,067	2,625	-	-	-	221,817
	World Bank (MDI)	*****	*****	*****	*****	*****	*****			*****	*****
	Support Cost	*	*	*	*	*	*			*	*
	UNIDO (Solvent)			**1,464,733**							**1,464,733**
	Support Cost			108,974							108,974
Total Annual Funding Instalment (US$)		**4,854,558**	**5,353,287**	**7,394,943**	**2,176,800**	**649,919**	**216,000**	**-**	**-**	**-**	**20,645,507**
Total Support Costs (US$)		429,590	474,876	599,919	177,642	53,759	18,915	-	-	-	1,754,701
Total Costs to MLF		**5,284,148**	**5,828,163**	**7,994,862**	**2,354,442**	**703,678**	**234,915**	**-**	**-**	**-**	**22,400,208**

+ Phase out targets in the Solvent Sector (UNIDO) also include 5.6 ODP tonnes of 1,1,1 trichloroethane (TCA) and 16.5 ODP tonnes of carbon tetrachloride (CTC) **NOT** reflected in the above table. For TCA, 3.0 and 2.6 ODP tonnes will be phased out in 2005 and 2006 respectively. For CTC, 16.5 ODP tonnes will be phased out in 2005. There will be no further consumption of CTC and TCA after 2005 and 2006 respectively.

* Funding for the MDI Sector is not considered in this Agreement and the country reserves the right to request funding for the MDI sector in the future in accordance with the prevailing eligibility and funding criteria of the Multilateral Fund, as stipulated in paragraph 2 of the Agreement.

2. Refrigeration (Manufacturing) Sector (UNDP)

2.1 Investment and Enterprise-level Activities

Enterprise Participation

The second batch of 34 participating enterprises was endorsed by KLH in January 2004, upon verification of the enterprise baselines by SPMCU and UNDP. Upon completion of all activities in these enterprises targeted in 2004 and 2005, the CFC phase-out that would be achieved, would contribute 287 ODP MT to the 2005 and 2006 annual CFC phase-out targets.

The third batch of 3 additional participating enterprises was endorsed by KLH in August 2004, upon verification of the enterprise baselines by SPMCU and UNDP. Upon completion of all activities in these enterprises (targeted in 2005 and 2006), the CFC phase-out that would be achieved would contribute 77 ODP MT to the 2005 and 2006 annual CFC phase-out targets.

Procurement

- In January 2004, UNDP announced the Invitations for Expressions of Interest for prospective suppliers of the equipment to be procured for the second batch of 34 participating enterprises (referred to above). The Invitations for Expressions of Interest were posted in the websites of UN Development Business, IAPSO and UNDP-Jakarta for one month. UNDP also prepared the technical specifications and finalized the short list of 6-8 vendors for each type of equipment to be procured for this batch of enterprises in January 2004. The international competitive bidding exercise was carried out in February 2004 and purchase orders issued in June 2004. The total funds committed for the procurement for the second batch of 34 participating enterprises amounted to about US$ 755,000.

- In November 2004, UNDP announced the Invitations for Expressions of Interest for prospective suppliers of the equipment to be procured for the third batch of 3 participating enterprises (referred to above). The Invitations for Expressions of Interest were posted in the websites of UN Development Business, IAPSO and UNDP-Jakarta for one month. UNDP also prepared the technical specifications and finalized the short list of 6-8 vendors for each type of equipment to be procured for this batch of enterprises in October 2004. The international competitive bidding exercise was carried out in November/December 2004 and purchase orders issued in January/February 2005. The total funds committed for the procurement for the third batch of 3 participating enterprises amounted to about US$ 260,000.

Completions

All enterprise-level activities such as site preparation, installation of equipment, training, trials and commissioning, were completed for 32 of the 45 enterprises, who were participants in the first batch. SPMCU assisted by UNDP experts confirmed completion of all these activities, including phase-out of CFCs, phase-in of the replacement technology, depletion of CFC stocks and destruction of redundant CFC-based baseline equipment. Certificates of completion confirming this were issued to 32 enterprises, resulting in a CFC phase-out of 334 ODP MT during 2004, against the agreed phase-out target for 2004 of 300 ODP MT.

2.2 Technical Support Component

A technology assistance workshop was held in August 2004 to provide technology guidance to the enterprises in the sector, UNDP and KLH experts. About 52 enterprises attended the workshop.

2.3 Policy & Management Support Component

KLH continued follow-up on the procedures needed to effect the modification of existing regulations on CFC imports (instituting a realistic licensing/quota system and new regulations for registration/reporting of CFC usage), with the relevant government departments and stakeholders. A coordination meeting was held in May 2004 with the Department of Customs and Ministry of Industry and Trade, for discussions on the planned regulation changes covering an import quota system and registration/reporting system for CFC usage. A workshop for government policy/decision-makers was held in August 2004, to discuss the various options and modalities for accomplishing these regulatory changes.

KLH, with the assistance of UNDP and World Bank, carried out the verification of activities under the 2003 Annual Implementation Programme, through Faculty of Mechanical Engineering, Universitas Indonesia.

SPMCU/KLH assisted UNDP and World Bank in preparation of the reporting documentation for the 2005 Annual Implementation Programme and on the progress of the 2003 Annual Implementation Programme.

SPMCU/KLH also continued verification of baselines of prospective participant enterprises to be included in future batches.

2.4 Brief report on activities carried out during 2005

2.4.1 Investment Component

Enterprise Participation

SPMCU continued the exercise of verification of baselines at prospective participant enterprises. From the original 180 enterprises identified in 2002 in the sector survey at the time of preparation of the proposal, it was found that 25 had changed business, 14 closed down and 46 enterprises had not yet responded.

SPMCU continued to search and receive proposals from enterprises to make sure that all refrigeration manufacturers in the country could be reached and evaluated for participation in the program. In 2005 SPMCU identified additional 16 enterprises, however after survey and verification, only 10 enterprises were considered eligible for participation in the program, all of them were with a foaming-baseline with total annual CFC consumption of 100.03 MT. However, most of these companies were established after July 1995, therefore their endorsement is still on hold, pending decision by KLH.

Procurement

Following the endorsement of KLH for 37 eligible enterprises in end-2004, equipment procurement actions were completed by UNDP for these enterprises. During 2005, the equipment delivery, installation, commissioning and trials was completed or in process.

Enterprise-level Activities

All activities were completed at the remaining 14 of the 45 enterprises which were endorsed and had participated in the first batch and at 29 enterprises from the second batch and relevant UNDP completion documentation signifying project completion was issued.

2.4.2 Policy and Management Support Component

Policy and Regulatory Actions

The enforcement of ODS regulations has been facing a challenge especially in monitoring the imports of ODS. In 1998, Ministry of Industry and Trade had appointed PT. Perusahaan Perdagangan Indonesia (PT. PPI), as sole authorized and registered importer of CFCs. In 2004, PT. PPI had imported only around 437 MT of CFCs, while the market demand for CFCs had been above 3,000 MT. The verification exercise of national CFC consumption in 2003 indicated that imports had been made by unregistered importers and these imports were largely unrecorded. The determination of the exact national annual consumption is thus difficult as the existing data on recorded imports would not be reliable. SPMCU continued meetings of government stakeholders for finding solutions to address this problem. A series of meetings between the ministries of Environment, Industry and Trade and other stakeholders were facilitated to resolve the issue through an amendment of existing regulations. By the end of 2005, the draft of a new regulation that would expand the list of registered importers had been produced.

Awareness Actions

A workshop for public awareness was organized at the Jakarta Convention Center during the commemoration of the National Environment Day. Different type of campaign was carried out during the commemoration of the International Ozone Day by organizing public rallies and providing the participants with T-shirts displaying "Stay Sun Safe" appeal. A number of road show workshops in Sumatra, Kalimantan and Sulawesi were arranged, for information dissemination on the plan and promoting participation by eligible enterprises.

2.4.3 CFC Phase-out and Results

In 2005, a total phase-out of 305.75 MT ODP was achieved through completion of enterprise-level activities. The annual phase-out target in 2005 at the amount of 300 MT ODP was therefore achieved.

2.4.4 Reporting and Verification

SPMCU and KLH prepared the reporting on 2004 activities and annual implementation programme for 2006 with the assistance of UNDP.

The verification of 2004 activities was carried out through Universitas Indonesia from late 2004 until early 2005 and the final report was completed by mid 2005 and submitted to the Executive Committee Secretariat for its review in July 2005.

A competitive bidding exercise was carried out in October 2005, for selecting an independent entity to carry out the task of verification of 2004 activities. A consulting firm PT. Hatfindo Prima, a subsidiary of Hatfield Group, Canada, was selected.

3. Refrigeration Servicing Sector (UNDP)

3.1 Recovery/Recycling Programme

Enterprise Participation

The identification of refrigeration servicing establishments was carried out throughout 2004, by SPMCU/KLH with assistance from UNDP, through:

a) Assosiasi Bengkel Electronik Indonesia (Indonesia Electronic Service Association)

b) Department of Mechanical Engineering, Institut Teknologi Bandung (ITB).

c) Department of Mechanical Engineering, Universitas Trisakti.

The first batch of 188 major servicing establishments and 60 training establishments was endorsed for participation by KLH to UNDP (for which preparatory actions for procurement were carried out by December 2003). An additional 59 major servicing establishments were endorsed for participation by KLH to UNDP in November 2004.

SPMCU continued outreach efforts for identification of servicing establishments for participation in the recovery and recycling Programme, in the northeastern regions such as Batam and Sumatra, in cooperation with Assosiasi Bengkel Electronik Indonesia (Indonesia Electronic Service Association) and local environmental bodies (Bappedalda) and through holding local workshops. About 76 service establishments were identified in this region as a result.

Procurement

- UNDP issued purchase orders for the refrigerant recovery/recycling equipment for 188 servicing establishments and 60 training establishments in May 2004. The purchase order for equipment for the additional 59 servicing establishments was issued in December 2004, using the previous bidding exercise. The total funds committed for this procurement are about US$ 1.15 million.

- The equipment ordered for the 60 training establishments began to arrive in December 2004 and the distribution of equipment commenced (all equipment has been distributed for both the servicing and training establishments of the first batch by early 2005).

3.2 Pilot Retrofitting/Replacement Demonstration Programme

In order to facilitate and complete identification of participating 70 representative end-users in this Programme, preliminary screening of about 28 supermarkets, 13 hotels, 7 hospitals, 5 restaurants, 5 marine installations and 10 industrial installations (total 68) was completed in 2003. The mechanism of participation in the Programme and for providing assistance to these end-users was finalized in 2004. It was found that due to varying schedules for retrofitting/replacement by different end-users and high expectations of compensation, the Programme was not moving ahead according to schedule. However, many of these end-users and other identified end-users already completed retrofitting/replacement of their existing CFC-based installations in 2004, leading to a reduction of CFC usage by about 50 ODP MT annually. The demonstration retrofitting/replacement activities are expected to be ongoing at between end-2004 and mid-2005.

Efforts to promote retrofit/replacement of existing CFC-based equipment, continued throughout 2004, through periodic mini-workshops involving of ASATHI (Indonesian Association of Hotel Engineers, ARPI (Cold Chain Association of Indonesia) and APRINDO (Association of Indonesian Retail Merchants), which in turn disseminated information to their members through their newsletters.

3.3 Technical Support Component

Technical assistance for establishing a National Competency Standard for Refrigeration Technicians was provided. The standard is being formulated by Standards & Technology Division of KLH with assistance of local technical and legal experts.

3.4 Training Programme

Institut Teknologi Bandung (ITB), who was retained to carry out the Master Trainers programme initiated during 2003 (resulting in 82 Master Trainers) continued the tasks in 2004, targeting an additional 83 Master Trainers, drawn from four outlying regions: Balikpapan (East Kalimantan), Medan

(North Sumatra), Palembang (South Sumatra) and Makassar (South Sulawesi). In December 2004 the first training workshop was carried out in Balikpapan involving 14 Master Trainers from Balikpapan, Banjarmasin and Pontianak (the remaining 3 workshops were carried out in the first half of 2005).

For the Technician Training Programme, modalities and draft MOUs were developed, for collaborating with selected Training Establishments (who have already received the demonstration servicing equipment) to deliver the training programmes. It is expected that upon finalization of arrangements between KLH and these Training Establishments, such as course materials, curriculum, etc., the Technician Training programme would commence in the second half of 2005.

3.5 Policy and Management Support Component

- A meeting with the Technical Committee of the National Ozone Steering Committee was facilitated to obtain support for KLH's initiative to effect changes in the current regulations governing import and trade of CFCs.

- An inter-divisional meeting within KLH was organized to discuss and press for regulatory changes governing registration and reporting requirements for CFC users

- Several road show workshops were arranged in Sumatra, for awareness and information dissemination related to the impacts of commitments and obligations arising out of the phase-out plan for the servicing sector.

- A workshop for green journalists was organized by KLH for promoting Ozone Layer Protection through media in conjunction with the commemoration of the International Ozone Day. Around 14 journalists from print and electronic media participated in the workshop.

3.6 Brief report on activities carried out during 2005

3.5.1 Investment Component

Recovery & Recycling Programme

The process of identification of service establishments for the program was carried out through socialization of the program by organizing "road show" workshops across the country, concentrating on major cities such as the provincial capitals like Jakarta, Bandung, Semarang, Surabaya, Denpasar, Palembang, Medan and Batam. In these workshops, SPMCU coordinated with local associations or local chapters of national associations such as Electronic Workshop Association, Electronic and Refrigeration Association as well as the Department of Environment of the local government. The partner organizations identify their members as well as other service establishments, accumulate statement and commitment letters and send them to SPMCU. The associations also served as the liaison between SPMCU and the enterprises. This cooperation proved to be efficient and effective. A total of 188 servicing enterprises had been endorsed in the first batch and 59 in the second batch. The process of procurement, distribution and commissioning of the recovery and recycling equipment for all 247 enterprises was completed. During 2005, 199 enterprises from Greater Jakarta, Central Java, East Java, Bali, North Sumatra and South Sumatra completed activities and signed relevant documentation.

In order to expedite further identification of servicing enterprises for participation in the program, Universitas Trisakti was retained as a consultant for identification of potential recipients with the target of 420 in Java area. This task was completed in 2005. The result of the identification process by the consultant, combined with registration through Master Trainers and through socialization, is being verified for the next endorsement by KLH.

Pilot Retrofitting/Replacement Demonstration Programme for end-users

A local expert was retained for identifying end-user participants in this program. A total 37 end-users from the hotel, hospitals, ice-factories, restaurant and food processing industries, located in Greater Jakarta, Central and West Java, South Sulawesi and Bali, were identified in 2005. The conversions at these end-users are in progress.

Demonstration equipment for Training Establishments

During 2005, demonstration servicing equipment was provided to an additional 60 training establishments.

Training Programme

The Master Trainers programme was completed in the first quarter of 2005, with 69 additional Master Trainers from Makassar, Medan and Palembang. There is now a pool of total 156 Master Trainers.

The Technician Training programme commenced in 2005 and was conducted through major service establishments and the training establishments. The technicians were provided with classroom and hands-on training, a guide in good practices, documentation and other technical reference materials. Upon completion of the prescribed course they were provided with a certificate. In 2005, a total 81 technicians from Malang, East Java (20), Semarang, Central Java (43) and Jakarta (18) were trained by Institut Teknnologi Malang, Balai Latihan Pekerja dan Teknisi Semarang, PT Sanjaya Sakti Semarang and Universitas Gunadarma Jakarta respectively. Technician training for about 1,000 technicians is in progress currently.

3.5.2 Technical Support Component

Competency Standard for Refrigeration Technicians

The draft of the National Standard of Work Competence (SKKNI) for refrigeration technicians was presented by the consultant appointed for this purpose and was discussed in a meeting attended by representatives of several institutions including the Ministry of Manpower. It was agreed that the National Standard would be attached to the existing National Standard for Metal and Machinery. Series of discussion have been organized to establish the legal framework for the future implementation of the standard.

Awareness Actions

Effort to improve public awareness has been carried out in coordination with local governments. Series of road-show workshops were organized in Jakarta, Semarang, Surabaya, Medan, and Palembang along with the events for signing of completion documentation by recipient servicing establishments of the first and second batches of recipients.

3.5.3 CFC Phase-out and Results

CFC phase-out was projected to be a result of implementation of recovery and recycling program, retirement of old equipment, retrofit/replacement of CFC-based refrigeration equipment and better servicing practices as the result of training. In 2005, 198 recipients of recovery and recycling equipment had signed the completion documentation and started using the equipment in their daily service. The use of the equipment was expected to reduce the need of CFC by 175 ODP MT based on their average annual consumption. An additional 100 ODP MT is projected to be reduced through retirement of old equipment and an additional 50 ODP MT through retrofitting/replacement of CFC-based equipment. Thus, the 2005 phase-out target would be achieved.

4. MAC Servicing Sector (World Bank)

The phase-out objective of the 2004 Annual Implementation Programme is to ensure that the national CFC-12 consumption limit for MAC sector of 695 MT will not be exceeded in 2004.

4.1 Policy Action

Discussion with other related government agencies was facilitated in March, participated by representatives of the Ministry of Environment, Department of Trade and Industry, Custom and Excise, National Police Department, Attorney, Bandung Institute of Technology, Department of Agriculture, and Association of Experts on Air Condition and Refrigeration. The meeting was to discuss the development of draft for proposing measures/regulations such as: a) ban on new MAC installations with CFC based system, b) prohibition on venting the remaining CFC, c) compulsory use of recovery until when the system is serviced or decommissioned; d) prohibition of mislabeling containers; e) training for proper method in MAC servicing sector, and f) plan to equip appropriate government agency such as custom and excise with CFC identifier for prevention of smuggling. The meeting paid special attention on the suspicion of the occurrence of illegal import of CFC as the records of CFC import made available from the Custom and Excise, the National Bureau for Statistic and the sole registered importer PT Perusahaan Perdagangan Indonesia were far below the actual demand.

Issuance of certification – Certification scheme is being developed in line with the training for technicians programme. The training of trainers has been completed and 20 trainers passed the technical examination for qualification for training the technicians. Appropriate certificate was issued to them for undertaking training for technician through their respective training institutions.

4.2 Enterprise-level activities

The 2004 Annual Implementation Programme aims to eliminate the consumption of 110 MT of CFC-12 by installing about 108 recycling machines. 108 service shops have been identified in Jakarta, West Java, Central Java, East Java and Bali. The respective recovery, recycling and recharging machines have been delivered and commissioned at the respective 108 MAC service shops.

4.3 Technical Assistance (TA) Activities

TA activities under the MAC Sector Plan's 2004 Annual Implementation Programme concentrate on the following: (a) strengthening the overall institutional framework for phase-out; (b) provides regulatory support; (c) public awareness, (d) management, monitoring and evaluation of the project and enhancement of capabilities of participating institutions under the PMU; (e) project implementation that will be subcontracted to an independent institution, and, (f) information exchange. The activities carried out in the first implementation programme are as follows:

- *Workshops to MAC service shop personnel involved in implementation of phase-out activities*. Eleven workshops have been carried out in Jakarta, Bandung, and Surabaya in 2004 (an additional 6 workshops were held in 2005). These workshops were attended by 614 service shop owners or their representatives, prior to receiving the recycling machines (375 service shops in 2004). Statement and commitment letters had been obtained during the survey of identification of these service shops.

- Socialization programme was carried out in collaboration with BPLHD (Provincial Agency for Environment Protection) of West Java Province on June 28, 2004. Awareness programme was implemented by promoting the programme during the commemoration of International Ozone

Day by organizing journalist outreach, displaying banners at the highway connecting Jakarta and Bogor.

- *Train the trainer programme*. This programme has been organized on September 6 to 10, participated by trainees represented 20 training institutions across the country. The curriculum comprised the principles of refrigeration and refrigerants, MAC system, leak detecting and repairing, retrofitting from CFC base to non-CFC base, principle and practice of recovery, recycling and recharging, and general good MAC servicing practice.

- *Development of Standard Inspection Manual*. The first version of standard inspection manual for identification of refrigerant type in the MAC unit was produced and distributed to the trainees of the Train the Trainers Programme on September 10. This version would be further developed and distributed during the upcoming Train the Technicians Programme.

- *Development and printing of pamphlets*. Stickers for car owners to identify refrigerant type in the MAC unit, name of the shop that last worked on the system, and detailed of work done would be produced and distributed during the train the technicians Programme and together with the distribution of R&R equipment to the beneficiaries. Fliers/leaflets were also distributed during workshops and surveys so that potential service shops are more familiar and convinced about the program.

- *Training.* Train the technicians Programme was in preparation. Proposals from the appointed training centers that sent their staff to the Train the trainers Programme were being reviewed.

- *Monitoring Reports.* During delivery of 3R machines, DWA also attached monthly monitoring report to be submitted every quarter. Each shop is provided 24 monitoring forms for 2 years. Through monitoring report, DWA can evaluate utilization and performance of the recycling machines as well as commitment of the service shop in using the machine. Monitoring reports can also help identify any problems arising in the field.

4.4 Brief report on activities carried out during 2005

4.4.1 Investment Component

Surveys of potential service shops were conducted from April 2005 to July 2005 concentrated in 7 regions of Sumatera Island (South Sumatera, Jambi, West Sumatera, Batam Island, Riau Kepulauan, Riau and Lampung). During the survey, letters of commitment to participate in the MAC sector plan Programme were attained by the Group Coordinator for 108 service shops. Total target ODP phase-out of the 108 shops is 124.4 MT of CFC-12.

Table 1: Distribution of Potential Shops by Region

	Region	No. of Shops	%
1	South Sumatera	24	22.2
2	Jambi	6	5.6
3	West Sumatera	16	14.8
4	Batam Island	8	7.4
5	Riau Kepulauan	3	2.8
6	Riau	35	32.4
7	Lampung	16	14.8
Total		108	100.0

The bidding process for the prospective supplier has been completed. The L/C is being currently opened. The equipment arrived in the service shops in December 2005.

4.4.2 Non-investment Component

Workshops for MAC service shop personnel involved in implementation of phase-out activities - Workshops for approximately 180 MAC service shops were conducted to prepare and inform service shop owners and technicians about their rights and responsibilities under the Programme including monitoring and reporting requirements for CFC-12 consumption, and to inform them about the operating procedures in MAC sector phase-out approach. Workshops were held in: (i) Bandung (August 2005) for 48 service shops covering an area around Jakarta, Bogor and Western Java; (ii) Solo (held in July 2005) for 16 service shops covering Central and Eastern Java and Bali; and (iii) Medan – workshops were held here for 116 service shops covering the North Sumatera area (in September 2005)

5. Foam Sector (World Bank)

5.1 Background

The Montreal Protocol Executive Committee in its decision at 42nd Meeting on March 2004 has approved the Sector Plan phase-out for the use of CFC in the Indonesian Foam sector. With the completion of this sector plan, all CFC-11 consumption in the foam sector in Indonesia will be eliminated completely by the end of 2007. In accordance with the Executive Committee's approval of the Sector Plan for the Phaseout of the use of CFCs in the Foam Sector in Indonesia in its 42nd Meeting, Indonesia is hereby requesting release of the second tranche of US$1,050,000 for implementation of the year 2006 Annual Implementation Programme. With this funding, Indonesia's CFC-11 consumption for servicing in the foam sector will be reduced by 155.7 MT in 2006.

The plan consists of investment component to replace present ODS-based technology with a combination of non-ODS and, where not feasible, low-ODS technologies (water-based (CO2) and HCFC-141b). Conversion projects will be accompanied by associated non-investment and policy actions to ensure that the phase-out proceeds on schedule and those ineligible enterprises are also compelled to stop use of CFC-11.

Table 2. Control Target of ODP Elimination and Annual Funding

Year of Programme	Total consumption in Foam Sector (MT)	Estimated Ineligible & Not Identified Consumption (MT)	Impact Targeted in Given year (MT)	Investment Project Fund Approved ($)	National & supporting Activities ($)
2001	2,651.00	0	0		
2002	2,583.00	66.2	0		
2003	2,515.00	66.2	0		
2004	2,046.00	66.2	0	30,000	70,000
2005	1270.20	66.2	129.8	1,570,000	75,000
2006	688.40	66.2	155.7	1,000,000	70,000
2007	232.70	66.2	66.05	107,654	35,000
Sub-Total			**352.00**	2,707,654	250,000
Adjustment for HCFC-141b Consumption			-18.9		
Grand Total (MT)			**333.1**		

The extract of the Agreement between Government of Indonesia and the Executive Committee of the Multilateral Fund (Document UNEP/OzL.Pro/ExCom/42) covering the disbursement schedule and annual CFC consumption and phase-out control targets, pertaining to the foam sector in Indonesia, is reproduced in Table 3 below:

Table 3. CFC Consumption and Phase-out Control Targets for the Foam Sector:

Parameter	2003	2004	2005	2006	2007	2008	2009	2010	Total
Maximum allowable annual consumption on the substances (ODP tonnes)		5,546	3,880	2,331	1,122	30	30	30	N/A
Annual CFC phase-out target in the foam sector (ODP tonnes)	0	0	129.8	155.7	66.5	0	0	0	352
Annual Funding Installment (US$)	0	1,725,000	1,050,000	147,564	35,000	0	0	0	2,957,564
Agency Support Costs* (US$)	0	129,375	78,750	11,067	2,625	0	0	0	221,817

By completing this sector phase-out plan, all CFC-11 consumption in the foam sector in conjunction with presently ongoing foam projects by the end of 2007 in Indonesia will be eliminated. The funding request targets the remaining eligible consumption of CFC-11 will be carried out through a series of annual Programmes. The overall project impact is 333.1 ODP MT. From investment projects for phase-out of eligible consumption, the impact is 279.1 ODP MT, and from policy actions to phase-out identified ineligible consumption, the phase-out amount is 54 ODP MT.

The investment project consists of 20 rigid foam and 10 integral skin foam enterprises. This investment conversion projects shall be accompanied by associated policy actions to ensure that the phase-out proceeds on schedule and that ineligible enterprises are also compelled to stop use of CFC-11. The implementation of work plan was prepared with objective to assure that control target to eliminate the national consumption in foam sector by December 2007 for 333.1 MT of CFC-11.

5.2 Objectives

The objectives of the 2004 annual programme was to develop the implementation mechanisms and implementation arrangements to ensure the phase-out target for the following year would be able to be achieved in a timely manner. This objective was achieved. The phase-out target for the year 2004 was attained from the completion of on-going individual/terminal project.

5.3 Projected Activities Target

Target	- Establishment of project implementation arrangement for investment and non-investment component - Designated a group coordinator to facilitate the implementation of investment project component - Designated a coordinator to facilitate the implementation of non-investment project component

5.4 Programme Implementation of 2004

The Foam Sector Plan was approved at the MP Executive Committee (ExCom) meeting in March 2004 for the amount of $2.95 million. The first tranche of $1,725,000 was released to support preliminary stage of the project activities.

5.4.1 Investment Component

- KLH and the World Bank agreed upon implementation arrangements for the foam sector plan implementation.

- The implementation of investment activities is being carried out by PT. Dasa Windu Agung (DWA) as the group coordinator and representative of the beneficiaries through a Sub-grant Agreement Document No. B-215E/Dep.VI/LH/11/2004 signed officially in November 2004.

- The Group Coordinator (GC) is responsible for identifying and verifying eligibility of recipients, as well as procuring and distributing the equipment to the selected foam enterprises. An annual work plan was prepared by GC describing the implementation plans in order to carry out the investment component of sector foam phase-out plan.

- During 2004, the GC carried out pre-assessment visits to relevant prospective foam recipients to revalidate the original baseline information. It was considered important to assess the current conditions of prospective recipients and to assure that requirements for the conversion technology are still valid and acceptable.

- Part of the process included informing enterprises fully on the implications of selecting HCFC-141b as an alternative technology. Presentation of the costs and consequences of the selection had been introduced to the prospective enterprises.

- The pre-assessment visit and its evaluation verified the eligibility of 11 Rigid Foam enterprises and 5 Integral Skin Foam enterprises to be endorsed by KLH. The participation of these 16 project beneficiaries will reduce 130,7 ODP MT of CFC-11 in 2005.

- Rigid Foam: Under rigid foam sub-sector, 11 foam enterprises participated. They are dealing with production of insulation panel for telecommunication and commercial refrigeration, in-situ, solar heater, house ware products and others. The rigid foam sub-sector contributed consumption of 83.24 tons of CFC-11 in 2004, with consumption of polyol and isocyanate of 274 tons respectively.

- Integral Foam: Under the integral foam sub-sector, foam enterprises participated. They are dealing with the production of arm rests, accessories for automotive and furniture. Potential foam enterprises under the sector deal in production of arm rest, accessories for automotive and furniture. Under the rigid foam sector, 47.5 tons of CFC-11 was consumed in 2004, with consumption of polyol and isocyanate of 397 tons and 274 tons respectively.

5.4.2 Non-Investment Component

- It was agreed by the World Bank and KLH that the non-investment component would be implemented through KLH. Responsible person had been assigned to coordinate the non-investment component.

- World Bank and KLH agreed on the implementation mechanism which described the roles and responsibilities of the various stakeholders

- The operational mechanism for enterprise participation in the Plan was finalized in consultation with the World Bank.

- The modalities and procedures for verification of baseline of participating enterprises were finalized. This included development of documentation requirements and obtaining commitments from the enterprises in line with KLH and World Bank regulations.

5.5 Brief report on activities carried out during 2005

5.5.1 Investment Component

- By the end of 2005, the programme will be able to deliver the phase-out target for 129.8 ODP MT.

- it was confirmed that 16 enterprises confirmed to participate in the programme. These comprise of 11 rigid foam enterprises and 5 integral skin foam enterprises which engage in the production of automotive/furniture products. The companies have been endorsed by KLH and approved by the World Bank

- The 11 rigid foam enterprises participating in foam sector plan implementation in 2005 are located in various areas: 6 enterprises are located in Jakarta, 2 located in East Java and 2 in Medan. The survey found enterprises have satisfactory working conditions. It was also found that conditions of production facility of each enterprise different to another depending on scale of economic and products being produced. Some enterprises still apply conventional production process using hand-mix and others have already applied foam machines in their production facilities. The companies are listed in the Table 4 below:

Table 4. Companies Participated in 2005 Phase out Activities in Foam Sector

No	Name of Company	ODP (Kg)
1	Adi Budaya Cipta, PT	3,500
2	Bernadi Utama, PT	6,000
3	Cipta Karya, CV	4,000
4	Harrison UD	3,000
5	Langgeng Makmur Industri Tbk, PT	18,000
6	Logam Menara Murni, PT	8,000
7	Mega Metal Perdana, PT	11,000
8	Pangaji Mario Refconindo, PT	12,100
9	Sigma Engineering, PT	4,640
10	Wika Intrade, PT	9,000
11	Willich Isolasi Pratama, PT	4,000
	TOTAL	83,240.00

- The 5 integral skin foam enterprises participating in foam sector plan implementation in 2005 are located in various areas: two enterprises are located in Jakarta and the other three are located in East Java. The survey of their production facilities found that all of the enterprises use foaming equipment in their production. The integral skin companies are listed in Table 5 below:

Table 5. Companies participated in 2005 Phase out Activities in Integral Skin Foam:

No	Name of Company	ODP (Kg)
1	Biru SCK, PT	6,000
2	Kumala Indah Tata	13,500
3	Mitra Sakti Motor, UD	5,000
4	Rizata Wijaya	9,000
5	Sumber Mulia, UD	14,000
	Total	47,500

- The bidding process to procure 16 units foaming machine and its accessories has been finalized. The purchase contract with the selected supplier Rim Polymers Industries Pte. has been signed. The equipment arrived in the designated ports and has been delivered to the enterprises which were followed by installation, commissioning and trials.

5.5.2 Non-investment Component

- Workshop for prospective enterprises with the involvement related government institutions had been carried out to introduce the programme and provide some background implementation of sector foam phase-out plan. Four workshops were conducted by MoE in cooperation with the Group Coordinator with objectives for awareness and understanding about foam sector project to local government, ministries, potential and existing foam enterprises. The workshops were held in Medan, Bekasi, Surabaya, and Jakarta.

- Policy Development: Activities under the policy development subcomponent include a review of existing regulations (e.g. MOT issued regulation use CFC until 2007 for small and medium enterprise, health and safety regulations relating to alternatives such as flammable substances and Methylene Chloride, etc.) to determine recommendations for improving the regulations under the foam sector. The review will be conducted by a consultant, and the process for hiring a consultant was initiated in August 2005. In addition, the consultant will conduct a study on economic instruments to encourage industries to implement non-ODS technologies. The draft is expected to be completed by December 2005.

- Technical Assistance: Develop information materials in Bahasa Indonesia for environmentally benign substitute technologies for foam sector, conduct analysis about the applicability of alternative technologies for the Indonesian enterprise.

- Public Awareness: A consultant has been hired to fulfill the Terms of references for public awareness. Activities under the public awareness component includes the following:

  - Public awareness tools development
  - Workshop for foam enterprises, local stakeholders and chemical suppliers.

6. Aerosols Sector (World Bank)

The Executive Committee approved the release of funds for the Technical Assistance project in the aerosol sector in the amount of US$371,910. Currently the KLH have selected a nodal person for the aerosol sector. KLH has developed a workplan for activities in 2005. A local consultant was hired to revalidate the list of aerosol companies, interview companies to glean needs, develop recommendations for the aerosol companies, develop a handbook on safety, technical, legal (e.g. regulations) issues, and to organize a public awareness/stakeholder workshop. The stakeholder workshop will comprise of members of the Ministry of Health and the Ministry of

Finance, Ministry of Industry, the Cosmetic Association, aerosol companies, aerosol industry, NGOs (e.g. Consumer Help Desk), and the KLH, would be conducted to define the aerosol technical assistance needs in Indonesia. Advertisements will be made to raise public awareness, inform stakeholders about the availability of National Aerosol Filling Centre, and inform companies about the possibilities about participating in TA programme.

7. Solvent Sector (UNIDO)

The Plan for Terminal Phase-out of ODS in the Solvent Sector was approved by Executive Committee at its 44th h Meeting in November 2004. The implementation of the project started in January 2005. The work plan for the project and the Operational Mechanism for Implementation (OMI) were discussed. It was recognized that the major reduction in the use of solvents had to be made in the course of 2005. The major component of the plan in 2005 was investment support through the implementing of ODS phase out projects.

7.1 Industry Conversion projects in 2005

7.1.1 One larger maintenance company, GMF Aero Asia has been identified to be eligible for retroactive payment of already purchased cleaning equipment while converting from TCA to water based systems in their cleaning operations. Relevant contract to execute the payment of total amount of U$ 40,233 evidenced by eligible invoices has been prepared by UNIDO.

7.1.2 Three shoe sole producing companies have been identified as users of CFC-113 and TCA for cleaning and degreasing of shoe soles prior to painting and gluing. Agreement on the participation in the solvent sector plan and the Agreement on the implementation procedures including company commitment to stop the use of any ODS solvent in the future were signed.

7.1.3 Selection/Procurement of Machinery: Technical specifications were prepared and competitive bidding organized. Quotations have been solicited from various potential suppliers. Bids were evaluated and purchase orders placed.

7.2 Project Management

7.2.1 Organizational set up has been done within Ministry of Environment and responsibility for the project implantation has been assigned to selected staff.

7.2.2 Appointees for different responsibilities and Government approval of the plan per se have been announced to UNIDO in October 2005.

7.2.3 Creation of Sector Phase-out Plan Management & Coordination Unit (SPMCU) is being reviewed.

7.2.4 Hiring of National Experts, members of SPMCU was delayed and it was not done until end 2005.

7.3 Government Action

7.3.1 The Government is actively working with UNDP as Lead Implementing Agency as well as with UNIDO and the World Bank as cooperating agencies on the effective procedures to restrict imports of the solvents and to ensure compliance with relevant Agreement.

7.4 Achievement in 2005

As a result of activities undertaken in 2005, the following is the achievement through the implementation of this project component:

Phase out of TCA	5.4 ODP MT
Phase out of CFC-113	58.2 ODP MT
Total:	63.6 ODP MT

8. Policy Actions

While Indonesia has established a licensing system in 1999, the effectiveness of the existing regulation has been a challenge for the Government of Indonesia to monitor and control its ODS supply. Since 2004, UNDP and the World Bank has been working closely with the Ministry of Environment (KLH) on proposed changes to the existing regulatory framework, to institute a realistic licensing/quota system and new regulations for registration/reporting of CFC usage. KLH has worked with the relevant government departments and stakeholders to that effect. A coordination meeting was held in May 2004 with the Department of Customs and Ministry of Industry and Trade, for discussions on the planned regulation changes covering an import quota system and registration/reporting system for CFC usage. A "Proposal for the New Regulatory Mechanism required for Compliance with the Montreal Protocol" was drafted by UNDP and the World Bank, provided to KLH and introduced to the Technical Committee/Stakeholder Workshop for government policy/decision-makers held in August 2004, to discuss the various options and modalities for accomplishing these regulatory changes.

In March 2005, a joint interagency mission (UNDP, World Bank, UNIDO and UNEP) was conducted, to interact with the Ministry of Trade and Industry and Customs to mobilize cooperation and support on the effort to amend the regulation. The mission met with the Minister of Environment who assured the agencies at the meeting that he would intervene to expedite the changes in the regulation. Since then KLH had a series of meetings (seven times) with related government institutions, such as the Ministry of Trade, Ministry of Finance/Custom, Ministry of Industry and the Statistical Bureau, to review existing regulation, in which a draft revised regulation on licensing system has been developed as an output. The improved licensing system is expected to be issued as a Minister of Trade Decree in the near future.

During the MOP held in Dakar in December 2005, the Implementing Agencies and the Multilateral Fund Secretariat had further discussion with the delegation of Indonesia on the progress and a further joint mission to Indonesia to follow-up on the process for amending the regulation was suggested. In this second joint mission that took place in February 2006, with the participation of the Multilateral Fund Secretariat, the mission attended the Technical Committee and Steering Committee meetings and presented to the Committees critical information on compliance with the Montreal Protocol and meeting the requirements on annual Performance Verification on meeting phase-out targets and national consumption limit, as stipulated in the Agreement of the National Phase-out Plan entered into between the Multilateral Fund and the Government of Indonesia. The mission met the Minister of Environment who again reiterated his commitment to intervene with the Minister of Trade to expedite the proposed change of the regulation. The mission was reassured again that a draft revised regulation on licensing system has indeed been developed, and a Ministerial Decree would be issued in the very near future.

The Ministry of Environment also had finalized a MoU with Custom Office to strengthen control on ODS import to Indonesia by Custom. On the same occasion, KLH provided Custom with 20 refrigerant identifiers to be used in main Indonesian ports to ascertain refrigerant types that are coming to Indonesia.

It is emphasized that while the actual change of regulation has not taken place, the efforts and actions undertaken by KLH, and its intensive interaction with the relevant ministries, with assistance and cooperation of the Implementing Agencies, has now led to the production of a draft revised regulation that will soon be issued under a Ministerial Decree. The MoU with Custom Office, and the soon to be issued revised regulation, will definitely improve the monitoring and control by the Government of Indonesia on ODS import. In fact, towards second half of 2005, the sole government-designated registered importer, PT PPI, has already taken a very positive first step, to allocate a quantity of CFC import, to be undertaken by one of the two major unregistered imports, Cool Group,

to import officially under PT PPI's name. All these efforts undertaken by the various institutions in Indonesia to improve its monitoring and control of ODS supplies, should be duly recognized.

9. CFC Phase-out and Results

The CFC phase-out in the various sectors in 2004 is tabulated in Table 6 below:

Table 6. CFC Phase-out Results for 2004

Sector	Agency	Agreed Phase-out Target (ODP MT)	Actual Phase-out Achieved (ODP MT)
Refrigeration (Manufacturing) Sector	UNDP	300	323.79
Refrigeration (Servicing) Sector	UNDP	200	224.95
MAC Servicing Sector	World Bank	110	144.41
Aerosols Sector (PT Yulia)	World Bank / UNDP	80	223
Completion of on-going individual projects	World Bank	976	409.70
Completion of on-going individual projects	UNIDO		55.10

10. Unspent Balance from Previous Fund Tranches

Tables 7, 8 and 9 below highlight the total funding released by the Executive Committee, the amount of fund disbursed or committed by the Implementing Agencies, the unspent balance from fund released, as of 31 December 2005, and the duration/year the unspent balance will be used to cover project activities:

Table 7 - Implementing Agency: UNDP

Sector	Total Amount Approved (US $)	Amount Disbursed / Committed (US $)	Uncommitted / Undisbursed Balance (US $)	Year of Commitment of Unspent Balance (US $)
Refrigeration Manufacturing	5,250,000	2,918,420	2,331,580	2006
Refrigeration Servicing	4,502,746	1,525,985	2,976,761	2006
Aerosols (PT Yulia)	224,000	125,076	98,924	2006

Table 8 - Implementing Agency: World Bank

Sector	Total Amount Approved (US $)	Amount Disbursed / Committed (US $)	Uncommitted / Undisbursed Balance (US $)	Year of Commitment of Unspent Balance (US $)
MAC	4,064,400	3,265,187	799,213	2006
Foam	371,910	6,800	365,110	2007
Aerosols	1,725,000	792,303	932,697	2006

Table 9 - Implementing Agency: UNIDO

Sector	Total Amount Approved (US $)	Amount Disbursed / Committed (US $)	Uncommitted / Undisbursed Balance (US $)	Year of Commitment of Unspent Balance (US $)
Solvents	1,464,733	614,486	850,247	$701,223 -2006 $149,024 – 1Q 2007

11. Performance Verification on 2004 Phase-out Targets and Consumption Limit

11.1 Terms of Reference of Performance Verification

In compliance with the provisions of the Agreement (Document UNEP/OzL.Pro/ExCom/44/73, Annex-XI), an independent performance verification was conducted during the months of December 2005 and January 2006 by an independent entity, PT Hatfindo Prima, an environmental consultancy based in Bogor, Indonesia, to verify that the agreed CFC phase-out targets and consumption limit for 2004 have been achieved. PT Hatfindo was selected through a competitive bidding process. PT. Hatfindo Prima was established in 1990 as the Indonesian subsidiary of the Hatfield Group, Canada. The Hatfield Group, established in 1974 in Vancouver, Canada, provides services to clients in resource industries, governments, international financial institutions, development agencies, and multilateral institutions, in the fields of environment, resource development and institutional training. The Hatfield Group has offices in Canada, Indonesia, Thailand, and Chile. The Hatfield Group specializes in complex, multi-disciplinary environmental projects, often in collaboration with multinational networks of local experts and specialists in particular fields, centering on providing cost-effective and sustainable solutions. Hatfield s clients include UNDP, World Bank, ADB, DANIDA, CIDA, Ford Foundation, etc.

PT. Hatfindo Prima, Indonesia, provides consultancy services for Environment Impact Assessments, Monitoring, Environment Management Systems, Performance Audits, Natural Resource Management, Biodiversity Assessments, Geographical Information Systems and Remote Sensing. PT Hatfindo Prima has never participated in activities related to the Indonesia Sector Phase-out Plan, nor a recipient under these Sector Phase-out Plans.

The performance verification would verify the national level CFC consumption in Indonesia for 2004, based on the data available from the designated importer(s) and the data available from the relevant ministries and customs. In addition, through desk review and meeting/visits to a select number of distributors of the substances concerned, the actual quantities of the substances distributed and sold in Indonesia in 2004, would be estimated. Further, the consumption of substances at the enterprise levels would be established through a statistically credible manner, for cross-checking the import and distribution figures. The performance verification shall also confirm that the annual phase-out targets for the substances for various sectors in 2004 were achieved and all enterprise-level activities were completed. The performance verification would also establish whether or not all the policy, management and technical assistance activities for 2004, were carried out as planned. The scope of work for the performance verification can be summarized below:

- Establish and verify that the national level of consumption of the substances was less than the control target for 2004 (5,546 ODP MT);
- Establish and verify that the national-level phase-out of substances during 2004 was 1,666 ODP MT or more, consisting of 976 ODP MT from completion of on-going projects and 690 ODP MT from activities initiated under the sector phase-out plans;
- Establish and verify that the total phase-out of substances from completion of individually approved ongoing projects during 2004, for various sectors during 2004, was 976 ODP MT or more;

- Establish and verify that total phase-out of substances from completion of sub-projects/ activities for recipients participating in the respective sectoral plans was 690 ODP MT or more; and

- Establish and verify that technical assistance activities in the 2004 Annual Implementation Programmes were duly conducted as described in the 2004 Annual Implementation Programme report.

The general methodology utilized in carrying out the performance verification is described below:

a) From the national production, import and export figures of the substances in Indonesia during 2004, the national-level consumption figures for the substances would be calculated as Consumption = Production + Imports – Exports. Since there was no production or exports in Indonesia, Consumption = Imports. The import figures were obtained from the various official and unofficial sources

b) The data available from NOUs of countries exporting ODS to Indonesia, the total amounts of various ODS entering Indonesia were correlated to confirm the import figures available from various sources

c) The estimated total in-country sales of the substances for 2004 available from the distributors/traders, was used for cross-checking the information available from a) and b) above.

d) The estimated consumption by recipient enterprises during 2004 in the various sectors was used for cross-checking the information available from a) to c) above.

e) The phase-out achieved at the enterprise/recipient-level for ongoing projects in each sector was confirmed through desk review of completion documentation. From this, the sector-level phase-out figures for ongoing projects were established.

f) The phase-out achieved at the enterprise/recipient-level from sub-projects under each sector plan was confirmed through field/in-plant visits. Due to the large number of such recipients, a statistical sampling approach was used. About 15% of the recipients, which represented at least 15% of baseline ODS consumption were randomly selected. From this, the sector-level phase-out figures under the respective sector plans were established.

g) The completion of national-level technical assistance activities was confirmed

In establishing the various control targets and parameters, reasonable extrapolations of data were used as needed.

11.2 Verification of Annual National Level Consumption

11.2.1 2004 Targets

The national level annual consumption and targeted reduction for Annex A Group I, Annex B Group II and Annex B Group III (the Substances) for 2004 are presented in Tables 10 a) and 10 b) below. The maximum allowable annual Substance consumption target is set at 5,546 ODP MT. The total annual reduction target for the Substances is 1,666 ODP MT, of which 976 ODP MT is from the completion of ongoing projects and 690 ODP MT from activities undertaken under the sector plans. The total annual phase-out target of 690 ODP MT is achieved from: Refrigeration Manufacturing Sub-sector, 300 ODP MT; Refrigeration Servicing Sub-sector, 200 ODP MT; Mobile Air Conditioning (MAC) Sector, 110 ODP MT and Aerosol Sector, 80 ODP MT.

Table 10 a) Indonesian Annex A Group I, Annex B Group II and Annex B Group III Consumption and Reduction targets for 2004

	Agreed Target for 2004 (ODP Tonnes)	
Maximum Annual Allowable Consumption of the Substances	5,546	
Total Annual Reduction in Consumption of the Substances	1,666	
- Achievement from completion of on-going projects		976
- Achievement from activities under Sector Phase-out Plans		690

Table 10 b) Sector-level Phase-out Targets

	Agreed Target for 2004 (ODP Tonnes)
Annual Phase-out in the Refrigeration Manufacturing Sector	300
Annual Phase-out in the Refrigeration Servicing Sector	200
Annual Phase-out in the MAC (Servicing) Sector	110
Annual Phase-out in the Aerosol Sector	80
Total	690

11.2.2 2004 National Level Consumption

Recorded and unrecorded Imports

Since there is no production of CFCs in Indonesia or export of CFCs from Indonesia, the figure for national annual consumption should be the same as the amount of CFCs imported.

CFC imports are reported by the National Statistics Bureau (BPS), the Directorate General of Customs and Department of Trade. The official import data from these three sources was verified by PT Hatfindo to be between 437.39 to 615.78 MT, as reflected in Table 11 below. The recorded CFC import as reported by the National Statistics Bureau (BPS) during 2004 was 615.78 MT. The CFC import as recorded by the Department of Trade was 437.39 MT; and the recorded CFC import from data obtained from the Customs was 602.58 MT.

Table 11: 2004 CFC Import Data Recorded by GOI

Substance	**HS Code**	**Recorded Imports (ODP MT)**		
		National Statistics Bureau (BPS)	**Ministry of Trade**	**Directorate General of Customs**
CFC-11	2903.41.000	0	0	0
CFC-12	2903.42.000	529.78	437.39	602.58
CFC-113	2903.43.000	0	0	0
CFC-114/115	2903.44.000	0	0	0
CFC-13	2903.45.100	0	0	0
CFC-112	2903.45.200	86.00	0	0
CFC-111	2903.45.300	0	0	0
CFC-214	2903.45.940	0	0	0
R-502	3824.71.000	0	0	0
CTC	2903.14.000	0	0	0
Total		**615.78**	**437.39**	**602.58**

In accordance with the prevailing regulations, there is only one government-designated (registered) importer of ODS in Indonesia (PT PPI). Based on records provided and examined, the total import of ODS in Indonesia in 2004 by this registered importer was 437.39 ODP MT, which matches data provided by the Ministry of Trade, which is not surprising, as PT PPI is owned by the Ministry of Trade.

Due to the weaknesses (structural as well as enforcement) of the existing import regulations, there were additional imports of ODS predominantly through two main unregistered importers. PT Hatfindo was able to obtain the unrecorded import data from these two unregistered importers, through telephone interviews and in-person meetings. Table 12 below reflects the unrecorded ODS imported:

Table 12 – 2004 CFC Imports by Government Designated Importer and Major Unofficial Importers

Importer	**Unrecorded Imports (ODP MT)**					
	CFC-11	**CFC-12**	**CFC-113**	**CFC-114**	**CFC-115**	**Total**
Cool Group	259	1,408	0	0	0	6,667
Sugi Group	30	320	0	0	0	350
Total	**289**	**1,728**	**0**	**0**	**0**	**2,017**

Given that the above data were unrecorded import, no documentation to support these figures was forthcoming from the unregistered imports. The above-mentioned unregistered importers represent over 95% of the unrecorded imports into Indonesia, based on market information. The total unrecorded imports can thus be extrapolated to a maximum of **2,123** ODP MT.

Based on the figures shown in Table 11 and 12, the total ODS imports in Indonesia in 2004 (recorded and unrecorded) were estimated at **2,560.39 ODP MT (minimum) to 2,738.78 ODP MT (maximum).**

Exports of ODS to Indonesia

The total imports (recorded and unrecorded) figures were cross-checked with official export data of neighbouring exporting countries, China, India and South Korea, as well as the EU and transshipment through Singapore obtained by the NOU from its NOU counterparts. The quantities of CFC exported to Indonesia were verified by PT Hatfindo as reflected in Table 13 below:

Table 13 – Exports of ODS to Indonesia in 2004

Export Country	**Exports of ODS to Indonesia (ODP MT)**					
	CFC-11	**CFC-12**	**CFC-113**	**CFC-114**	**CFC-115**	**Total**
China	61	1,468	0	0	0	1,529
India	0	96	0	0	0	96
South Korea	343	324	0	0	0	667
EU (France)		175	0	0	0	175
Singapore		38	0	0	0	38
Total	**404**	**2,101**	**0**	**0**	**0**	**2,505**

The data from exporting countries in Table 13 above of 2,505 ODP MT corroborates the range of total import figures (recorded plus unrecorded).

Consumption

From Domestic Sales by Distributors

In order to further cross-check the import figures, the total domestic sales of ODS in Indonesia in 2004 was required to be established. There are about 20 distributors of CFCs in Indonesia. Of these twenty distributors, four major distributors accounted for more than 90% of the CFCs sold. Therefore, it was considered reliable to sample these four main distributors, in order to arrive at an estimate of the overall quantity of CFCs sold domestically.

Based on records of sales obtained from these four distributors, the respective quantities of ODS sold by them in Indonesia in 2004 are tabulated in Table 14 below:

Table-14: Net Domestic Sales of ODS in Indonesia in 2004

Distributor	Location	Net Domestic Sales of ODS (ODP MT)					
		CFC-11	CFC-12	CFC-113	CFC-114	CFC-115	Total
AC&R Group	Jakarta	261.12	391.68	0.00	0.00	0.00	652.80
Cool Group	Jakarta	20.00	1,010.00	0.00	0.00	0.00	1,030.00
Herry Group	Jakarta	163.20	384.00	0.00	0.00	0.00	547.20
Sugi Group	Jakarta	28.00	120.00	0.00	0.00	0.00	148.00
Grand Total		**472.32**	**1,905.68**	**0.00**	**0.00**	**0.00**	**2,378.00**

Two of the above four distributors were also unregistered importers. There were sales transactions between the unregistered importers and the two other distributors. The two other distributors also procured the some quantities of ODS from PT. PPI, the registered importer. To avoid potential double counting of figures, the quantities for sales figures between importers and distributors have been ignored and only the net sales to the market have been considered.

Based on the figures in Table-14, PT Hatfindo concluded that the net total quantity of CFCs sold in Indonesia in 2004 was estimated to be **between 2,378 ODP MT and 2,616 ODP MT**, as the four distributors named above account for over 90% of the total sales in Indonesia.

From ODS consuming enterprises in various sectors

ODS consuming enterprises are present in all sectors in Indonesia. Based on the baseline ODS consumption in these ODS consuming enterprises at the time of approval of individual projects or sector plans that aimed to address their ODS consumption, and after deducting the ODS phase-out in these enterprises during 2004, the net maximum demand for ODS at all these enterprises in various sectors is tabulated in Table 15 below:

Table-15: Maximum Demand of ODS in ODS consuming sectors in Indonesia in 2004

Sector	Maximum Consumption based on baseline (ODP MT)		
	Ongoing projects	Sector Plans	Total
Aerosols Sector	0	70.00	70.00
Foams Sector	961.20	352.00	1,313.20
Refrigeration (Mfg) Sector	0.00	817.21	817.21
Refrigeration (Svcg) Sector	0.00	872.00	872.00
MAC (Svcg) Sector	0.00	585.00	585.00
Other Sectors (MDI, CTC)	0.00	118.00	118.00
Grand Total	**961.20**	**2,814.21**	**3,775.41**

It may be noted that the ongoing projects in the Foam Sector covered enterprises in the flexible foam sub-sectors (box foam and molded foam).

Most enterprises in the flexible box foam sub-sector have predominantly converted to Methylene Chloride as the blowing agent in place of ODS, due to economic reasons. Thus, the actual ODS consumption by these enterprises is likely to be substantially lower than the figure indicated above.

Conclusion

Based on the above, the total estimated ODS consumption in Indonesia during 2004, can be summarized in Table 16 below:

Table 16: Summary of Estimates of ODS Consumption in Indonesia in 2004

Total recorded and unrecorded ODS imports in Indonesia	2,738.78 ODP MT
Total exports of ODS to Indonesia	2,505.00 ODP MT
Total domestic sales of ODS in Indonesia	2,616.00 ODP MT
Maximum domestic demand for ODS in India	3,775.41 ODP MT

From Table-16 above, the National-level Consumption of the substances ranges from 2,505 ODP MT to 3,775 ODP MT. It is unlikely that the margin of error in establishing these quantities would exceed ±15%. Thus, even after applying this margin of error, the performance verification confirmed that the national-level consumption of the substances in Indonesia for 2004 is below the agreed maximum allowable consumption of 5,546 ODP MT.

11.3 Verification of CFC Phase-out at Sectoral/Enterprise Level

11.3.1 CFC Phase-out from Completion of Approved On-going Individual Projects

A field survey was conducted based on random sampling of a minimum of 15% of the enterprises from all data provided by UNDP, World Bank, UNIDO and KLH. Random samples are selected from different regions and in different sub-sectors to obtain a representative sample. The phase-out target from on-going projects was 976 ODP MT, comprising of 776 ODP MT from foam projects and 200 ODP MT from aerosol projects.

Aerosol Sector

As part of the preparation of the Country Programme Update in 1999, the Government of Indonesia undertook a survey and estimated that there remained a number of small aerosol fillers and one or two larger aerosol filling companies with a total consumption of around 460 ODP MT for the Aerosol Filling Service Center project by PT Candi Swadaya Sentosa. Review of documentation by PT Hatfindo indicated that 60 ODP MT was phased out by PT Candi itself in 2003. Further review and survey of the Aerosol Filling Service Center documentation also indicated that almost none of the filling centers were consuming CFC anymore in 2004 and 2005 and thus phased out the 200 ODP MT in each of the two year in 2004 and 2005. The achievement of the phase out was further substantiated by the price differential between LPG and CFC prevailing at such significant value that it would not be economical for the filling centers to use CFC at all.

Foam Sector

The phase out target was 776 ODP MT from projects implemented by the World Bank and UNIDO. Verification was completed based on available secondary data including:

- Technical Audit Report for Association Foam Indonesia (Flexible Moulded Project Unit Foam) conducted by Agustinus Wijaya, Technical Auditor, 2004; and

- Project Cover Sheet: Phase out of residual CFCs in the Indonesian Foam Sector, KLH and the World Bank, 2003.

Results of a technical audit conducted in December 2003 involving eight of the 17 companies from the Moulded Foam Project indicated that no CFCs were used in their moulded foam production process. All eight companies utilized new high-pressure foam machines that replace the use of CFC-11 mostly with HCFC-141b. Based on the results of the technical audit, PT Hatfindo concluded that 193.70 ODP MT were phased out by the 17 enterprises in 2004.

From desk review of completion documents, PT Hatfindo also verified the completion in 2004 of the foam project at Udapana, and two foam projects implemented by UNIDO, phasing out 16 ODP MT and 55.10 ODP MT respectively. The total phase-out in the foam sector was therefore verified as 264.80 ODP MT.

Conclusion

Thus the total phase-out achieved by the completion of on-going individual projects in the foam and aerosols sectors, amounted to 464.80 ODP MT, as outlined in Table 17 below, against the phase-out target of 976 ODP MT:

Table 17 – Phase-out from Completion of On-going Individual Projects:

Sector	Baseline Consumption	ODS Phased out	Phase-out Target of On-going Projects
Foam - Udapana	16	16	776
Flexible Moulded Foam Projects	193.70	193.70	
Foam Projects – UNIDO	55.10	55.10	
Aerosols (PT Candi)	460.00	200	200
Total Phase-out from On-going Projects		**464.80**	**976**

11.3.2 Phase-out from Sector Plans

Verification of phase-out targets for sector plan level was conducted in Java (Jakarta, Bogor, Tangerang and Bekasi), East Java (Surabaya), Central java (Semarang) and Yogyakarta, Bali and North Sumatra. A representative sampling of a minimum of 15% of the enterprises as well as percentage of CFC consumption were selected for field survey. Table 18 below provides details of the sampling of field survey:

Table 18 – Field Survey of Completed Sector Plan Projects

Sector	Baseline consumption of completed projects	Baseline consumption of surveyed projects	Number of companies surveyed	% of ODS consumption of completed projects
Refrigeration Manufacturing (32 enterprises)	323.79	100.93	12	N/A
Refrigeration Servicing (247 enterprises)	216.01	39.30	38	18.19%
MAC (108 enterprises)	217.17	27.42	21	12.63%
Aerosol (1 enterprise)	223.00	223.00	1	100%

Through field survey at the selected enterprises, the 2004 CFC consumption at these enterprises were obtained through review of their purchase records. With the calculated percentage (Table 16) of the sampled enterprises' consumption as compared to the total consumption at all the enterprises with completed project, the remaining 2004 CFC consumption at all enterprises with completed projects is extrapolated and shown in Table 19 below:

Table 19 – Extrapolated Remaining 2004 CFC Consumption at Enterprises with Completed Projects

Sector	CFC-11	CFC-12	Total consumption from field survey	% consumption of completed projects	Remaining 2004 consumption (extrapolated)
Refrigeration Manufacturing	0.160	3.356	3.516	N/A	N/A
Refrigeration Servicing	0	7.469	7.469	18.19%	41.06
MAC	0	14.999	14.999	12.63%	118.76
Aerosol	0	0	0	100%	0

Aerosol Sector Plan

Verification of CFC reductions in the aerosol sector was conducted at PT Yulia, one of the largest aerosol-producing companies in Indonesia, producing primarily body spray products. In 2004, PT Yulia committed themselves to the elimination all CFC consumption. Since early 2004, PT Yulia has not utilized aerosols in their production process, having switched to Liquid Petroleum Gas (LPG), which according to representatives from PT Yulia, is cheaper than CFC. Based on the above, the performance verification concluded that PT Yulia has achieved its target for CFC reduction in 2004 and phased out its baseline consumption of 223 ODP MT, against phase-out target of 80 ODP MT.

Refrigeration (Manufacturing) Sector

A total of 32 enterprises in this sector completed their phase out activities in 2004. .Verification for refrigeration manufacturing sector was conducted at East Java (Surabaya) and Jabotabek. From a total list of 32 recipient companies provided by UNDP, 37.5% (or 12 enterprises) were surveyed. Field survey at these 12 enterprises confirmed that project activities were completed and the enterprises no

longer using CFC, and its baseline equipment physically destroyed. PT Hatfindo, through random sampling, therefore verified the completion of all 32 enterprises in the Refrigeration Manufacturing Sector, phased out its baseline consumption of 323.79 ODP MT, against the phase-out target of 300 ODP MT in this sector.

Refrigeration Servicing Sector

247 servicing establishments completed their phase-out activities in 2004. Verification for the refrigeration servicing sector was conducted in East Java (Surabaya), Bali, North Sumatra, and Jabotabek. A total of 38 enterprises were surveyed from a total list of 247 enterprises provided by UNDP (15% of the total), eight companies were in Jabotabek, eleven in East Java (Surabaya), seven in Bali, and twelve in North Sumatra (Medan).

From the field survey, these 38 enterprises consumed a total of 7.469 ODP MT of CFC-12. Using the percentage of consumption these enterprises represented (18.19%), the total remaining CFC consumption at the 247 servicing enterprises can be extrapolated to 41.06 ODP MT (Table 17). Since the 2003 baseline consumption of these 247 servicing establishments were 216.01 ODP MT, and they now only consumed 41.06 ODP MT in 2004, the difference would represents the phase-out achieved in 2004. Therefore a total of 174.95 ODP MT was phased out from these servicing establishments with completed project activities. In addition, through technical assistance programme in retrofitting/replacement demonstration undertaken by about 50 end-users, another 50 ODP MT of CFC would be phased out through reducing CFC demand for servicing. Therefore the total CFC phased out in the Refrigeration Servicing Sector would be 224.95 ODP MT, successfully achieving the phase-out target of 200 ODP MT.

MAC Sector

108 MAC service shops in Jakarta, West Java, Central Java, East Java and Bali have been provided with recovery, recycling and recharging machines.

Verification of CFC reductions in the Mobile Air Conditioning (servicing) industry was completed through field survey of 21 MAC service shops in the four regions, Central Java, Yogyakarta, East Java, and Bali. CFC consumption in 2004 at these 21 MAC service shops was verified. The consumption was used to extrapolate the total CFC consumed at all 108 service shops. The difference between the baseline consumption (217.17 ODP MT) and the 2004 remaining consumption (118.70 ODP MT) would be the verified reduction in CFC in 2004, 98.41 ODP MT. In addition, through retirement of vehicles in 2004, the demand for CFC would have been reduced by 46 ODP MT. PT Hatfindo therefore verified the phase out of a total of 144.41 ODP MT of CFC in 2004.

Conclusion

As a result of the field surveys and verification, the total CFC reduction in 2004 is established at 916.15 ODP MT through phase-out achieved in the Refrigeration Manufacturing, Refrigeration Servicing, MAC and Aerosol sub-sectors, as compared to the phase-out target of 690 ODP MT. Table 20 provides a summary of phase-out achieved with the implementation of the sector plans

Table 20 – Phase-out from Activities under Sector Plan

Sector	Baseline Consumption	2004 consumption from field survey	ODS phased out	Phase-out Targets
Refrigeration Manufacturing	323.79	N/A	323.79	300
Refrigeration Servicing	216.01	(41.06)	174.95	200
Refrigeration Servicing – from Retrofit/Replacement			50	
MAC	217.17	(118.76)	98.41	110
MAC – from retirement of vehicles			46	
Aerosol	223.00	0	223.00	80
Total Phase-out from Sector Plans			**916.15**	**690**

11.4 Verification of Technical Assistance and Policy/Management Activities

Review of KLH and Implementing Agencies' records was conducted to confirm that technical assistance and policy/management activities stipulated in the 2004 Annual Implementation Programme were carried out and substantially completed.

Refrigeration Manufacturing Sector

Technical Assistance

- A technology assistance workshop was organized by KLH and UNDP experts to provide technology guidance to the enterprises in the sector. 52 enterprises participated.

- Standards and Technology Division of KLH with the assistance of local technical and legal experts were formulating the establishment of a National Competency Standard for Refrigeration Technicians.

Policy and Management Actions

- KLH followed up the procedures of modification existing regulations on CFC imports by proposing the institution of a realistic licensing/ quota system and new regulations for registration/ reporting of CFC usage.

- A meeting was held in May 2004 between the Department of Customs and the Ministry of Trade and Industry to discuss planned regulatory changes covering an import quota system and registration/ reporting system for CFC usage.

- In May 2004 a workshop involving government policy/ decision makers was organized to discuss various options and modalities for accomplishing the regulatory changes.

- The Faculty of Mechanical Engineering of the University of Indonesia was carried out the verification of activities under 2003 Annual Implementation Program.

Refrigeration Servicing Sector

Technical Assistance

- Cooperation with ASATHI (Indonesian Association of Hotel Engineers), ARPI (Cold Chain Association of Indonesia) and APRINDO (Association of Indonesian Retail Merchants) continued to promote retrofitting and replacement of existing CFC based equipment throughout 2004. The information was disseminated through the newsletter to their members;

- The Master Trainers Programme was completed for 82 Master Trainers in 2003. An additional 83 Master Trainers from Balikpapan, Medan, Palembang and Makassar continued in 2004. The first workshop facilitated by 14 of the newly trained Master Trainers was held in Balikpapan;

- The demonstration of retrofitting/ replacement activities was implemented between end-of 2004 and mid 2005;

- Modalities and a draft MOU was developed for the Technician Training Programme.

Policy and Management Action

- A meeting with the Technical Committee of the National Ozone Steering Committee was held to support KLH's initiative to effect changes in the current regulations governing the import and trade of CFCs;

- An inter-divisional meeting was held at KLH to discuss an approach to promote regulatory changes governing registration and reporting requirements for CFC users;

- Workshops were conducted in Sumatra to raise awareness and disseminate information related to the impact of commitments and obligations arising from the phase-out plan for the servicing sector.

- A workshop was held for green journalists during the International Ozone Day Commemorations to promote Ozone Layer Protection. 14 journalists from print and electronic media participated.

MAC (Servicing) Sector

Technical Assistance

- Six workshops have been conducted in Jakarta (4 workshops), Bandung and Surabaya to brief participants on the use of recycling machines prior to the delivery of machines to the participants. The workshops were attended by 235 service shop owners and representatives;

- Collaboration with BPLHD (Provincial Agency for Environmental Protection) of West Java province to conduct socialization program was undertaken on June 28, 2004;

- A training for trainers program was delivered on September 6-10. 20 training institutions attended from across the country. The curriculum of training of trainers program covered the principles of refrigeration and refrigerants, MAC systems, leak detecting and repairing, retrofitting from CFC base to non CFC base, principles and practice of recovery, recycling and recharging and general good MAC servicing practice.

- The first inspection manual for the identification of refrigerant types in the MAC unit was developed and distributed during the training of trainers program on September 10, 2004;

- The training for technicians program was prepared and the process to select training centers to conduct training was being reviewed;

- Together with distribution of R&R equipment to the beneficiaries, the program will produce maintenance stickers to place on cars that identify the refrigerant type in the MAC unit, name of the shop that last worked on the system and work detail done;

- A public awareness program was implemented in which banners were displayed along the road between Jakarta and Bogor together with International Ozone Day Commemoration banners.

Policy Action

- A discussion with other related government agencies was organized for March 2004. The Ministry of Environment, Department of Trade and Industry, Customs and Excise, National Police Department, the Attorney General, Bandung Institute of Technology, Department of Agriculture and Association of Experts on Air Condition and Refrigeration attended; The meeting discussed proposed draft measures / regulations including:

    - Ban on new MAC installation using CFC based systems
    - Prohibition on venting remaining CFC
    - Compulsory use of recovery units when the system is serviced or decommissioned
    - Prohibition of mislabeling of containers
    - Training for proper method in MAC servicing sector
    - Plan to equip appropriate government agencies with CFC identifiers to facilitate the prevention of smuggling and the incidence of illegal importation of CFC

- The training of trainers has been completed and 20 trainers passed technical examinations qualifying them for training technicians through their respective training institutions.

Foam Sector Plan

- World Bank and KLH agreed that this component implementation strategy was to be coordinated by KLH and a responsible person to coordinated action at this stage will be named;

- The implementation mechanism was agreed upon describe roles and responsibilities of various stakeholders;

- The operational mechanisms for enterprise participation were finalized through consultation with the World Bank;

- The modalities and procedures for verification of baseline participating enterprises were also finalized.

Aerosol Sector

- A workshop was held and participants involved were the Ministry of Health, Ministry of Finance, Ministry of Industry, the Cosmetic Association, Aerosol companies and industries, NGOs and KLH. The aim of the workshop was to define the aerosol technical assistance needs in Indonesia; and

- A campaign was conducted to raise public awareness and inform stakeholders about the availability of national Aerosol filling centers and to inform companies about the possibilities for participating in the TA program.

11.5 Conclusion of the Performance Verification

Based on the observations and findings above, the conclusions of the performance verification are as below:

a) The national level ODS consumption in Indonesia for 2004 is below the maximum allowable consumption limit of 5,546 ODP MT as per the agreement;

b) The total phase-out of ODS in Indonesia in 2004 exceeds the phase-out targets of 1,666 ODP MT as per the agreement;

c) All technical assistance activities as envisaged in the 2004 Annual Implementation Programme have been satisfactorily carried out.

12. 2006 Annual Implementation Programme and Release of 2005 Funding Tranches

The 2006 Annual Implementation Programme is attached in Annex-1, with a request to the Executive Committee for release of the 2005 funding tranches for the four sectors, as below:

Sub-project	Implementing Agency	Tranche (US$)	Support Costs (US$)	Total (US$)
Refrigeration Manufacturing Sector	UNDP	750,000	67,500	817,500
Refrigeration Servicing Sector	UNDP	250,000	21,300	271,300
MAC Sector	World Bank	126,800	10,092	136,892
Foam Sector	World Bank	1,050,000	78,750	1,128,750
Total		**2,176,800**	**177,642**	**2,354,442**

INDONESIA
Phase-out of Annex-A Group-I and Annex-B Group –II & III Substances

2006 Annual Implementation Programme

1. Data

Country		Indonesia
Year of plan		2006
Number of years completed		3
Number of years remaining under the plan		2 (2006 and 2007)
Target ODS consumption of the preceding year (2005)		3,880
Target ODS consumption of the year of plan (2006)		2,331
Level of funding requested (US$)	Refrigeration Manufacturing	750,000 (UNDP)
	Refrigeration Servicing	250,000 (UNDP)
	MAC Servicing	126,800 (World Bank)
	Foams Sector	1,050,000 (World Bank)
	Total	**2,176,800**
Lead implementing agency		UNDP
Co-operating agency (ies)		World Bank, UNIDO

2. Targets

Indicators		**Preceding Year (2005)**	**Year of Plan (2006)**	**Reduction**
Supply of ODS in Sector (ODP MT)	Import	3,880	2,331	1,549
	Production *	N/A	N/A	N/A
	Total (1)			
Demand of ODS in Sector (ODP MT)	Manufacturing			
	Servicing			
	Stock piling	N/A	N/A	N/A
	Total (2)	**3,880**	**2,331**	**1,549**

* For ODS-producing countries

3. Industry Action

Sector	**Consumption Preceding Year (2005) (1)**	**Consumption Year of Plan (2006) (2)**	**Reduction within Year of Plan (1) - (2)**	**No. of Projects Completed**	**Number of Servicing Related Activities**	**ODS Phase-Out (ODP MT)**
Refrigeration (Mfg)	2,298	1,588				300
Refrigeration (Svcg)						300
MAC Servicing						110
Foams						156
Solvent						21

4. Technical Assistance

Activity	Description	
Refrigeration (Manufacturing) Sector – UNDP		
Workshop for user industry	Objective	Initiating enterprise participation and phase-out activities
	Target group	Prospective recipient enterprises
	Impact	Obtaining enterprise commitments for time-bound phase-out
Technical Assistance for procurement of equipment	Objective	Initiate procurement procedures for equipment to be provided to recipient enterprises for conversion to non-CFC technology
	Target group	Recipient enterprises
	Impact	Finalization of specifications and vendor shortlists, international competitive bidding and issuance of purchase orders/contracts leading to (upon completion) a phase-out of about 150 MT during 2006 and 150 MT during 2007.
Completion of activities at recipient enterprises from the previous batches	Objective	To confirm completion of equipment installation, commissioning and training activities at the recipient enterprises in the previous batches
	Target group	First and second batches of recipient enterprises
	Impact	Phase-out of about 150 MT of CFCs during 2006.
Refrigeration (Servicing) Sector – UNDP		
Workshops for Servicing establishments	Objective	Continued participation, commitments and phase-out activities from service establishments and for disseminating technologies and practices in refrigeration servicing to ensure sustainable reductions in CFC usage.
	Target group	Prospective recipient service establishments. It is proposed to organize a series of one-day workshops regionally
	Impact	Participation agreements with servicing establishments in place for the third and subsequent batches of the recovery/recycling Programme.
Technical Assistance for procurement of equipment	Objective	Initiate procurement procedures for equipment to be provided to the third batch of recipient servicing establishments for recovery/recycling
	Target group	Service establishments (third batch)
	Impact	Finalization of specifications and vendor shortlists, international competitive bidding and issuance of purchase orders/contracts
Technical Assistance for retrofitting/replacement demonstration	Objective	Completion of activities for retrofitting/replacement of CFC-based equipment and demonstration of retrofitting/replacement technologies.
	Target group	About 50 end-users identified and selected for participation in the Programme during 2006
	Impact	Facilitating early retrofitting/replacement decisions for CFC-based equipment by end-users, thereby leading to reductions of about 100 MT in servicing by 2006
Training	Objective	Training of technicians
	Target group	Refrigeration servicing technicians (about 1,000 in the second batch)
	Impact	Delivery of training inputs to technicians, in order to introduce good practices and awareness thereby facilitating indirect emission reductions amounting to about 60 MT during servicing by 2006.
MAC Servicing Sector – World Bank		
Training	Objective	Correct servicing techniques
	Target group	MAC service shop technicians
	Impact	
Workshop	Objective	Good service techniques; develop measures/regulation of MAC regulation
	Target group	Potential service shops; policy makers
	Impact	
Regulatory and Support	Objective	Facilitates policy meetings, discussions and workshops to set up MAC regulations
	Target group	Government and related stakeholders
	Impact	
Awareness & Promotional Programme	Objective	Public awareness for environmental and economic of ozone layer protection
	Target group	General public

	Impact	Public awareness and encourage public to have MAC system repaired by certified technicians
Verification of CFC Consumption by MAC Sector	Objective	Verification of phase-out
	Target group	MAC service shops
	Impact	Phase out target verified
Foam Sector – World Bank		
Workshop	Objective	Participation in phase out activities; and develop measures/regulations for foam sector plan
	Target group	Potential project recipient; policy makers
	Impact	
Technical Assistance	Objective	Provision of technical assistance
	Target group	Ineligible enterprises
	Impact	
Regulatory and Support	Objective	Policy measures
	Target group	Government and related stakeholders
	Impact	Foam regulations strengthened
Awareness & Promotional Programme	Objective	Public awareness
	Target group	General public
	Impact	Awareness of environmental and economic impacts of ozone layer protection programme
Monitoring and Evaluation	Objective	Monitor phase out activities
	Target group	Project recipients and related institutions
	Impact	Monitor and evaluate implementation of project
Verification of CFC consumption in the foam sector	Objective	Verify phase out targets
	Target group	Project recipients
	Impact	Consumption limits verified
Solvent Sector - UNIDO		
Assistance in management, policy management, improvement and enforcement of existing regulations	Objective	Facilitate effective programme implementation and monitoring of ODS supplies
	Target group	Government and related stakeholders
	Impact	Management capacity strengthened
Establishment of management information system, information dissemination techniques and public awareness workshops	Objective	Facilitate effective monitoring of ODS data
	Target group	Government institutions and participating enterprises
	Impact	

5. Government Action

Policy/Activity Planned	Schedule of Implementation
Type of Policy Control on ODS Import	Continuing enforcement of existing controls
	Establishment of a monitoring system for ODS users
	Modification of the existing regulations to introduce a realistic quota/licensing system for ODS imports
Public Awareness	Organization of one public awareness workshop and one workshop for government policy makers and decision makers.
Others	See below

The following activities are proposed for 2006, under the Policy and Management Support component:

a) Continuing implementation of the operational mechanism for participation by enterprises in the Sector Phase-out Plans and for obtaining phase-out commitments from enterprises.

b) Verification of baselines of participating enterprises and confirmation of completion of activities at recipient enterprises.
c) Institution of a National Competency Standard for Refrigeration Technicians.
d) Further interactions with District-level environment impact management agencies, to formalize the mechanism for decentralized enforcement and monitoring of ODS controls.
e) Reporting on the 2004 implementation and preparation of 2006 annual implementation programme.

6. Annual Budgets

6.1 Refrigeration Manufacturing (UNDP)

Activity	Planned Expenditures (US $)
Sector Plan Management and Coordination unit (SPMCU) operation	35,000
Technical Assistance	100,000
Workshops and awareness	25,000
Equipment	450,000
Trials and training	80,000
Policy development and enforcement	15,000
Verification and certification	5,000
Contingencies	40,000
TOTAL	**750,000**

6.2 Refrigeration Servicing (UNDP)

Activity	Planned Expenditures (US $)
Sector Plan Management and Coordination unit (SPMCU) operation	26,000
Technical Assistance	50,000
Workshops and awareness	50,000
Equipment	50,000
Training	50,000
Policy development and enforcement	5,000
Verification and certification	3,000
Contingencies	16,000
TOTAL	**250,000**

6.3 MAC Servicing (World Bank)

Activity	Planned Expenditures (US $)
Investment projects - equipment	80,000
Trials and start-up	20,000
Technical assistance, training, workshops	26,800
TOTAL	**126,800**

6.4 Foams (World Bank)

Activity	Planned Expenditures (US $)
Investment projects (equipment, trials and start up)	1,000,000
SPMCU operation	10,000
Technical assistance	10,000
Workshops and training	17,000
Policy development and enforcement	10,000
Verification	3,000
TOTAL	**1,050,000**

7. Funding and administrative costs

The funding tranches and administrative support costs for the three sectors requested for the 2006 Annual Implementation Programme, including the duration activities under this funding tranche will be completed, are listed below:

Sub-project	Implementing Agency	Tranche (US$)	Support Costs (US$)	Total (US$)	Duration of Activities
Refrigeration (Mfg) Sector	UNDP	750,000	67,500	817,500	2006 - 2007
Refrigeration (Svcg) Sector	UNDP	250,000	21,300	271,300	2006 - 2007
MAC Sector	World Bank	126,800	10,092	136,892	2006 - 2007
Foam Sector	World Bank	1,050,000	78,750	1,128,750	2006 - 2007
Total		**2,176,800**	**177,642**	**2,354,442**	