NACIONES UNIDAS





Programa de las Naciones Unidas Para el Medio Ambiente

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**ESPAÑOL** 

ORIGINAL: INGLÉS

COMITÉ EJECUTIVO DEL FONDO MULTILATERAL PARA LA APLICACIÓN DEL PROTOCOLO DE MONTREAL Cuadragésima Cuarta Reunión Praga, 29 de noviembre al 3 de diciembre de 2004

#### PROPUESTA DE PROYECTO: NIGERIA

En el presente documento la Secretaría del Fondo formula comentarios y recomendaciones sobre la siguiente propuesta de proyecto:

#### Eliminación

• Plan nacional de eliminación de CFC (tercer tramo): programa de trabajo anual de 2005.

**PNUD** 

# HOJA DE EVALUACIÓN DE PROYECTO - PROYECTOS PLURIANUALES PAÍS: NIGERIA

#### TÍTULO DEL PROYECTO

#### ORGANISMO BILATERAL/DE EJECUCIÓN

Plan Nacional de eliminación de CFC (tercer tramo) del programa de trabajo anual de 2005

PNUD – Organismo principal de ejecución ONUDI- Organismo cooperador de ejecución Gobierno de Japón – Organismo de cooperación

#### TÍTULOS DE LOS SUBPROYECTOS

(a) Plan de eliminación del sector de las espumas	PNUD
(b)Plan de eliminación en el sector de los servicios de refrigeración, incluida la	PNUD
gestión	ONUDI
(c) Plan de eliminación en el sector de la fabricación de refrigeración	ONUDI
(d) Plan de eliminación en el sector de fabricación de aerosoles	Gobierno de Japón
(e) Campaña nacional de información, educación y comunicación	

ORGANISMO DE COORDINACIÓN NACIONAL	Oficina Nacional del Ozono, Ministerio Federal para el Medio
	Ambiente

## DATOS DE CONSUMO MÁS RECIENTE DE SAO OBJETO DEL PROYECTO

A: DATOS DEL ARTÍCULO 7 ((TONELADAS PAO 2003 A SEPTIEMBRE DE 2004)

Anexo A, Sustancias del Grupo I (CFC)	2 662,40
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### B: DATOS SECTORIALES DEL PROGRAMA DE PAÍS (TONELADAS PAO, 2003 A JUNIO DE 2004)

SAO	Espumas	Ref.	Aerosoles	SAO	Solventes	Agentes de	Fumigantes
						procesos	
CFC-11	1 825,70						
CFC-12		772,70	58,0				
CFC-114		3,0					
CFC-115		3,0					

Consumo de CFC remanente elegible para financiación (Toneladas PAO) ninguna
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## PLAN ADMINISTRATIVO DEL AÑO EN CURSO: Financiación total 2 261 000 \$EUA: Eliminación total 407 toneladas PAO

DATOS DEI	L PROYECTO	2004	2005	2006	2007	2008	2009	2010	Total
CFC	Límites del Protocolo de Montreal	3 650	1 825	1 825	547,5	547,5	547,5	0	n.c
	Límite de consumo anual	3 137	1 725	1 016	508	286	86	0	n.c.
(Toneladas	Eliminación anual con proyectos en curso	561	0	0	0	0	0	0	
PAO)	Eliminación anual nueva abordada	845	688	492	200	200	65	0	
	Eliminación anual no financiada	0	0	16.5	0	0	0	0	
	Eliminación de IS y bilateral	5,7	21,5	0	21,5	0	21,5	0	
CONSUMO	TOTAL DE SAO A ELIMINAR	1 412	710	508	222	200	86	0	
Consumo tota	al de SAO a agregar (HCFC)								
Costo del pro	yecto según presentación original (\$EUA)								
Costos finale	es del proyecto (\$EUA)								
Fi	nanciación para organismo principal PNUD	2 077 141	797 122	489 181	385 000	341 200	113 000	0	
Fi	nanciación para ONUDI	0	0	0	0	0	0	0	
Fi	nanciación para Japón	0	0	0	0	0	0	0	
Fi	nanciación final del proyecto	2 077 141	797 122	489 181	385 000	341 200	113 000	0	
	oyo finales (\$EUA)))								
Costo de apo	yo para organismo principal PNUD	183 863	69 261	42 146	32 770	28 228	8 290	0	
	osto de apoyo para ONUDI	0	0	0	0	0	0	0	
Co	osto de apoyo para el Gobierno de Japón	0	0	0	0	0	0	0	
To	183 863	69 261	42 146	32 770	28 228	8 290	0		
COSTO TO (\$EUA)	OTAL AL FONDO MULTILATERAL	2 261 004	866 383	531 327	417 770	369 428	121 290	0	
Relación de c	osto a eficacia final del proyecto ((\$EUA/kg)								5 ,27

## SOLICITUD DE FINANCIACIÓN: Aprobación de la financiación del 3er. Tramo tal como se indica en los párrafos precedentes.

RECOMENDACIÓN DE LA SECRETARÍA Para examen individual
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## DESCRIPCIÓN DEL PROYECTO

1. El Acuerdo para el plan nacional de eliminación de los CFC suscrito entre el Gobierno de Nigeria y el Comité Ejecutivo tiene como objetivo la eliminación total de los CFC en los aerosoles, las espumas, la fabricación de refrigeración y los sectores de servicio para el 31 de diciembre de 2009. El Acuerdo fue aprobado, en principio, por un nivel total de financiación (incluidos los costos de apoyo) de 14 325 167 \$EUA, que será pagado en 8 tramos. El PNUD, como organismo principal de ejecución es responsable de las actividades de aplicación en los sectores de servicios de la refrigeración y en la fabricación de espumas, lo mismo que del conjunto de la gestión del plan. ONUDI es responsable de los sectores de fabricación de aerosoles y refrigeración. El Gobierno de Japón brindará asistencia para la campaña de información nacional, educación y comunicación. A continuación se presenta el desglose de la financiación aprobada, el calendario de pagos y los objetivos anuales de consumo de CFC y eliminación establecidos en el Acuerdo.

<u>Tabla 1 – Financiación aprobada, calendario de pagos y objetivos de consumo anual de CFC y de</u> eliminación, con arreglo al Acuerdo

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL
	consumo con Protocolo de PAO)	3 650	3 650	3 650	3 650	3 650	1 825	1 825	547,5	547,5	547,5	0	n/c
Consumo notificado/previsto, toneladas PAO		4094,8*	4 115,5	3 686,2	-	-	-	-	-	-	-	-	-
Consumo autorizado PAO)	máximo total (Toneladas	-	-	-	3 352,7	3 137,0	1 725,4	1 015,9	507,6	286,1	86,1	0	-
	le los proyectos oneladas PAO)	171,3	429,3	333,5	194,2	560,7	0.0	0.0	0.0	0.0	0.0	0	1689
del plan (To	cción en virtud neladas PAO)	0.0	0.0	0.0	0.0	845,3	688,0	491,8	200,0	200,0	64,6	0	2 489,7
Reducción de SAO inelegible (Toneladas PAO)		0.0	0.0	0.0	0.0	0.0	0.0	16,5	0.0	0.0	0.0	0	16,5
I.S. 12,1 \$E	lel componente UA/Kg. PAO) y Japón	0.0	0.0	0.0	21,5	5,7	21,5	0.0	21,5	0.0	21,5	0	91,7
Reducción t	otal anual	171,3	429,3	333,5	215,7	1 411,6	709,5	508,3	221,5	200,0	86,1	0	4 286,8
	Financiación acordada PNUD	-	-	5 013 929	2 976 827	2 077 141	797 122	489 181	385 000	341 200	113 000	0	12 193 400
	Costos de apoyo PNUD	-	-	449 318	264 834	183 863	69 261	42 146	32 770	28 228	8 290	0	1 078 710
Cuando corresponda	Financiación acordada ONUDI	-	-	682 386	255 000	-	-	-	-	-	-	0	937 386
cuotas anuales de	Costo de apoyo ONUDI	-		82 521	33 150	-	-	-	-	-	=.	0	115 671
financiación en \$EUA	Financiación total acordada	-	-	5 696 315	3 231 827	2 077 141	797 122	489 181	385 000	341 200	113 000	0	13 130 786
	Costos totales de apoyo al organismo	-	-	531 839	297 984	183 863	69 261	42 146	32 770	28 228	8 290	0	1 194 381
	Costo total al FML	-	-	6 228 154	3 529 811	2 261 004	866 383	531 327	417 770	369 428	121 290	0	14 325 167

- 2. Durante la 38ª Reunión del Comité Ejecutivo se aprobó, en 2002, la financiación para las actividades de 2003 y en la 41ª Reunión del Comité Ejecutivo en 2003, se aprobó la financiación para 2004.
- 3. El consume máximo autorizado en 2003 fue de 3 352,7 toneladas de PAO.
- 4. El PNUD, en su calidad de organismo de ejecución presentó, en nombre del Gobierno de Nigeria, el informe sobre la marcha de las actividades aplicado en 2003-2004 y el Plan de Trabajo para 2005, con un pedido de financiación para el tercer tramo de 2 077,141 \$EUA.
- 5. Según el informe sobre la marcha de las actividades, todos los proyectos en curso en los sectores de las espumas y de la fabricación de refrigeración aprobados por el PNUD y la ONUDI con antelación al plan de eliminación de los CFC han sido terminados en 2004, excepto uno, en que la empresa declaró quiebra y todo el equipo, incluido el equipo suministrado en el marco del proyecto, fue embargado por el banco. La Dirección de servicios de apoyo a proyectos (Secretaría de la ONU) está intentando resolver este problema junto con el Gobierno. Como en la actualidad la empresa no está en funcionamiento, no hay consumo de CFC en esa empresa. La eliminación total de CFC tras haber terminado los proyectos en curso fue de 576,5 toneladas de PAO en 2003 y 140,8 toneladas de PAO en 2004.
- 6. <u>En el sector de fabricación de aerosoles,</u> con arreglo al Plan, la ONUDI firmó un contrato para el suministro de equipo e ingeniería para el uso en dos empresas de propulsores de aerosoles por hidrocarburos. Se visitó la empresa inicial en julio de 2004. Se ha previsto que para 2005 se eliminarán 58 toneladas de PAO.
- 7. <u>En el sector de fabricación de la refrigeración,</u> con arreglo al Plan se ha terminado todo el trabajo preparatorio en 2003. Los principales equipos de producción han sido entregados en los sitios del proyecto y éste ha sido puesto en servicio. Para el fin de 2004 se ha previsto eliminar 34,65 toneladas de PAO.
- 8. Las actividades del PNUD <u>en el sector de las espumas y la refrigeración</u> se vieron demoradas debido a dificultades conexas a costos superiores presentados por la Dirección de servicios de apoyo a proyectos (Secretaría de la ONU) y las elecciones en Nigeria. Se firmó el documento del proyecto para el primer tramo financiado en agosto de 2003. Se ha previsto para una fecha posterior en el año en curso realizar un seminario de formación para las empresas de espumas. Se ha previsto que se instalará el equipo en junio de 2005. Los tramos restantes serán implantados mucho más rápido, dado que no se necesita otro prototipo.
- 9. Las especificaciones de los equipos para los equipos de formación y de recuperación y reciclaje serán ultimados para mediados de 2004. Se espera culminar con la formación de los capacitadores en buenas prácticas para la gestión de los refrigerantes para mediados de 2005. Acto seguido, se procederá a una formación de los técnicos en todo el país, lo que insumirá los próximos años. Durante un período de 3 años se distribuirán e instalarán los equipos de recuperación y reciclaje. Tras distribuir y poner en funcionamiento el primer lote de equipos, se evaluarán las repercusiones de la recuperación y el reciclaje antes de adquirir el resto del equipo.

- 10. Con arreglo al componente Legislativo y de Formación Aduanera, se elaboró un proyecto global de reglas relativas a las licencias de importación y exportación para los SAO. En agosto de 2004 se efectuaron seminarios en los cuales participaron los principales interesados. Se está preparando el proyecto global para presentarlo al Gobierno para su aprobación. El PNUD ha enviado una carta el Ministerio Federal para el Medio Ambiente solicitando que este asunto sea tratado de manera urgente y de que sea objeto de un estrecho seguimiento. Se ha previsto que la formación de los oficiales aduaneros comenzará en el año 2005.
- 11. Se ha previsto que en 2004 la eliminación de CFC de los proyectos en curso y de nuevos proyectos será de 340,75 toneladas de PAO. Según el informe sobre la marcha de las actividades, los importadores y exportadores no están obligados por ningún requisito de informar al Gobierno datos relativos a las exportaciones e importaciones. En consecuencia, existen dificultades para elaborar una metodología de auditoria independiente para verificar los límites del consumo. Una vez que haya sido promulgada esta legislación, será posible tener una metodología para verificar los datos anuales. Mientras tanto, se han podido identificar algunos auditores independientes y se ha propuesto debatir esta cuestión con ellos. A la espera de la finalización y puesta en vigor de la legislación, el PNUD ha propuesto elaborar un ejemplo de procedimiento de auditoria para estimar si ese procedimiento puede servir para una verificación del consumo justificable.

## Programa de aplicación anual para el 2005

- 12. El programa de aplicación anual para el 2005 contiene actividades de planificación que deberán ser aplicadas por el PNUD en los sectores de las espumas y de los servicios de refrigeración. No se han previsto nuevas actividades para la ONUDI en los sectores de fabricación de aerosoles y de la refrigeración. Se estima que el consumo de CFC en 2004 será de 3 137 toneladas de PAO, basándose en el límite autorizado en el acuerdo y en 2005, se espera reducirlo en 1411, 6 toneladas de PAO, alcanzando así un consumo de 1 725,4 toneladas de PAO. Las actividades propuestas incluyen la organización de seminarios en la industria, la adquisición de equipos, la formación de técnicos en la industria de las espumas y en los servicios de refrigeración y campañas de toma de conciencia en el sector de fabricación de espumas. En 2005, las actividades relativas a la elaboración de normas gubernamentales abordarán:
  - (a) la prohibición de nuevas instalaciones y equipos que utilicen SAO;
  - (b) concesiones de importaciones e incentivos fiscales para fomentar el uso de substitutos y de tecnologías alternativas, lo mismo que equipos de recuperación y reciclaje;
  - (c) establecer un inventario de los importadores de SAO;
  - (d) la aplicación de un sistema de cuotas de importación de SAO;
  - (e) la certificación de técnicos y/o el establecimiento de condiciones para el reconocimiento de las asociaciones profesionales que pueden brindar esta certificación.

## Presupuesto pedido

13. El programa de aplicación anual de 2005 incluye un presupuesto de 2 077 141 \$EUA para la aplicación de las actividades propuestas y de 183 863 \$EUA de costos de apoyo para el PNUD.

## COMENTARIOS Y RECOMENDACIONES DE LA SECRETARÍA

#### **COMENTARIOS**

- 14. Se notificaron a la Secretaría para el año 2003 datos de consumo de CFC en virtud del Artículo 7 por 2 662,4 toneladas de PAO. Según el Acuerdo, el máximo total autorizado de consumo de CFC en 2003 era de 3 352,7 toneladas de PAO. Basándose en los datos notificados, se ha alcanzado el límite especificado en el Acuerdo.
- 15. La financiación solicitada de 2 077 141 \$EUA para la aplicación de las actividades propuestas y de 183 863 \$EUA como costos de apoyo para el PNUD, corresponde a la cuota de financiación correspondiente a 2005 en virtud del Acuerdo.
- 16. Cuando la Secretaria revisó el informe sobre la marcha de las actividades, llamó la atención al PNUD sobre los requisitos de establecer un sistema para realizar una auditoria independiente sobre la eliminación y el consumo de CFC en el país. La Secretaría indicó que en la 41ª Reunión del Comité Ejecutivo, cuando examinó la iniciación de un segundo tramo para Nigeria, solicitó al PNUD que adoptase disposiciones en el programa de aplicación anual de 2004 para elaborar una metodología que utilice una auditoria independiente para verificar los límites de consumo para 2003 y los años subsiguientes, tan como se prescribe en virtud del acuerdo del plan nacional de eliminación de los CFC (Decisión 41/57).
- 17. En el párrafo 10 supra se describe la situación actual de la auditoria independiente de los datos relativos al consumo de CFC. Además, el PNUD aclaró que, actualmente la legislación está siendo elaborada y que el PNUD está trabajando junto con el Ministerio para el Medio Ambiente para acelerar la adopción de las reglas necesarias para establecer un sistema de cuotas a la importación. A falta de legislación, el PNUD ha iniciado la elaboración de los procedimientos de verificación relativos a los importadores, junto con la asistencia de la oficina de aduanas. El PNUD ha iniciado el proceso de selección de funcionarios independientes.
- 18. Parecería ser que el informe sobre la marcha de las actividades correspondiente a 2004 indicaría que no han sido cumplidas las condiciones establecidas en el Acuerdo entre el Comité Ejecutivo y el Gobierno de Nigeria en relación con la verificación de los objetivos establecidos. Además, parecería ser que no se han satisfecho las prescripciones de la Decisión 41/57.
- 19. Durante la revisión del programa trabajo anual para 2005, la Secretaría observó que los indicadores de los resultados, tales como los relativos al consumo en el año precedente (2004) y el objetivo de reducción que recoge la diferencia de consumo entre los años 2004 y 2005, son exactamente los mismos que los objetivos establecidos en el Acuerdo. En lo atañe al Acuerdo, el límite de consumo para 2004 es de 3 137 toneladas de PAO. Se deberá observar que el consumo real notificado para 2003 fue inferior al límite máximo permitido incorporado en el Acuerdo por

- 689,6 toneladas de PAO. Se estima que la reducción lograda durante 2004 es de aproximadamente 340 toneladas de PAO. Parecería ser que el consumo en 2004 sería de aproximadamente 800 toneladas de PAO inferior al límite permitido para 2004 establecido en el Acuerdo.
- 20. De manera similar, el objetivo incluido en el programa de trabajo de 2005 es igual a la reducción anual de 1 411,6 toneladas de PAO para 2004 establecido en el Acuerdo. Sin embargo, este objetivo podría ser alcanzado en realidad a través de las actividades que se realizarán o realizaron en 2004, porque el consumo previsto en 2004 será muy inferior al valor indicado en el Acuerdo.
- 21. La Secretaría propone que el PNUD efectúa los ajustes que sean necesarios en el programa de trabajo de 2005. El PNUD ha revisado su programa de trabajo de 2005 basándose en el consumo real de CFC en 2003 y en el consumo estimado en 2004. Se han respectivamente ajustado los objetivos de reducción. En 2005, el objetivo de consumo de CFC sigue siendo el mismo que el previsto en el Acuerdo.

### RECOMENDACIÓN

22. El Comité Ejecutivo podría estimar necesario examinar la aprobación del programa de trabajo anual y el tramo de financiación pedido, habida cuenta de las informaciones brindadas supra.

# PROJECT COVER SHEET – MULTI-YEAR PROJECTS COUNTRY: NIGERIA

#### PROJECT TITLE

#### BILATERAL/IMPLEMENTING AGENCY

National CFC Phaseout Plan in Nigeria

SUB-PROJECT TITLES

UNDP – Lead Implementing Agency UNIDO – Cooperating Implementing Agency Government of Japan – Cooperating Agency

(a) Foam Sector Phase Out Plan

(b) Refrigeration Servicing Sector Phaseout Plan including Management

(c) Refrigeration Manufacturing Sector Phaseout Plan

(d) Aerosol Manufacturing sector Phaseout Plan

(e) National information, education and communication campaign

UNDP UNDP

UNIDO UNIDO

Government of Japan

NATIONAL CO-ORDINATING AGENCY: National Ozone Office, Federal Ministry of Environment

#### LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT

A: ARTICLE-7 DATA (ODP TONNES, 2003, AS OF SEP 2004)

Annex A Group 1 Substances (CFCs) 2,662.40

#### B: COUNTRY PROGRAMME SECTORAL DATA (ODP TONNES, 2003, AS OF 1 JUNE 2004)

ODS	Foam	Ref.	Aerosol	ODS	Solvents	Process agent	Fumigant
CFC-11	1,825.70						
CFC-12		772.70	58.0				
CFC-114		3.0					
CFC-115		3.0					

CFC consumption remaining eligible for funding (ODP tonnes) 2,662.40

**CURRENT YEAR BUSINESS PLAN:** Total funding US \$ million: total phase-out ODP tonnes. PROJECT DATA 2005 2006 2007 2008 2009 2010 Total Montreal Protocol limits 3,650 1,825 547.5 547.5 **CFCs** 1,825 547.5 0 3,137 1,725 1,016 508 286 0 Annual consumption limit 86 n.a. (ODP 0 0 0 Annual phase-out from ongoing projects 561 0 0 0 tonnes) Annual phase-out newly addressed 845 688 492 200 200 65 0 Annual unfunded phase-out 0 16.5 0 0 0 0 0 Phase out from IS and bilateral 5.7 21.5 21.5 0 21.5 710 508 200 TOTAL ODS CONSUMPTION TO BE PHASED OUT 1,412 222 86 Total ODS consumption to be phased-in (HCFCs) Project cost as originally submitted (US \$) Final Project costs (US \$): Funding for lead agency UNDP 2,077,141 797,122 489,181 385,000 341,200 113,000 0 Funding for UNIDO 0 0 0 0 0 0 0 Funding for Govt. of Japan 0 0 0 0 0 0 0 2,077,141 Total project funding 797,122 489,181 385,000 341,200 113,000 0 Final Support costs (US \$)) Support cost for lead agency UNDP 32,770 8,290 0 183,863 69,261 42,146 28,228 Support cost for UNIDO 0 0 0 0 0 0 0 0 0 Support cost for Govt of Japan 0 0 0 0 0 **Total support costs** 183,863 69.261 42,146 32,770 28,228 8.290 0 TOTAL COST TO MULTILATERAL FUND (US \$) 2.261.004 866,383 531.327 417,770 121.290 0 Final project cost effectiveness (US \$/kg) 5.27

FUNDING REQUEST: Approval of funding for 3RD tranche (2004) as indicated above.

## **NIGERIA**

## **National CFC Phase-Out Plan**

Report on 2003/2004 Implementation 2005 Annual Implementation Programme and Request for Release of the Third Funding Tranche

> Prepared Jointly By: UNDP (Lead Agency) UNIDO (Cooperating Agency)

## NIGERIA NATIONAL CFC PHASE-OUT PLAN

#### Report on 2003/2004 Implementation

## 1. Background

The Agreement for the National CFC Phase-Out Plan for Nigeria between the Government of Nigeria and the Executive Committee of the Multilateral Fund (UNEP/OzL.Pro/ExCom/38/70/Rev.1 Annex XII) covers the total phase out of CFCs in the Aerosol, Foam and Refrigeration Manufacturing and Servicing sectors by December 31, 2009. The maximum allowable consumption in 2003 was 3,352.7 ODP tonnes. The agreement was approved for a total funding level (including support cost) of \$14,325,167 to be released in 8 tranches.

UNDP as the lead agency would be responsible for the Foam manufacturing and refrigeration servicing sector as well as the management. UNIDO would be responsible for the Aerosol and Refrigeration manufacturing sectors. Government of Japan would assist in the National information, education and communication campaign. It should be noted that the funding from Government of Japan has been converted to notional ODP tonnes reduced using the \$12.1/kg formula as is the case with the Institutional strengthening projects.

The breakdown of the approved funding, disbursement schedule and annual CFC consumption and phaseout targets, as per the Agreement is shown below.

Table 1 - Approved Funding, Disbursement Schedule and Annual CFC Consumption and Phase-out Targets, as per the Agreement

			,	8	cis, as p	<u> </u>	8			,	,		
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL
Montreal Proconsumption (ODP tonnes	limits	3,650	3,650	3,650	3,650	3,650	1,825	1,825	547.5	547.5	547.5	0	n/a
Reported/Exp Consumption		4094.8*	4,115.5	3,686.2	-	-	-	-	-	-	-	-	-
Maximum al consumption (ODP tonnes		-	-	-	3,352.7	3,137.0	1,725.4	1,015.9	507.6	286.1	86.1	0	-
Reduction fro projects (ODI		171.3	429.3	333.5	194.2	560.7	0.0	0.0	0.0	0.0	0.0	0	1689
New reductio (ODP tonnes)		0.0	0.0	0.0	0.0	845.3	688.0	491.8	200.0	200.0	64.6	0	2,489.7
Ineligible OD tonnes)	OS reduction (ODP	0.0	0.0	0.0	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0	16.5
	r I.S. component ag (ODP tonnes) ateral	0.0	0.0	0.0	21.5	5.7	21.5	0.0	21.5	0.0	21.5	0	91.7
Total annual	reduction	171.3	429.3	333.5	215.7	1,411.6	709.5	508.3	221.5	200.0	86.1	0	4,286.8
	UNDP agreed funding	-	-	5,013,929	2,976,827	2,077,141	797,122	489,181	385,000	341,200	113,000	0	12,193,400
	UNDP support	-	-	449,318	264,834	183,863	69,261	42,146	32,770	28,228	8,290	0	1,078,710
Annual funding	UNIDO agreed funding	-	-	682,386	255,000	-	-	-	-	-	-	0	937,386
instalments where	UNIDO support	-	-	82,521	33,150	-	-	-	-	-	-	0	115,671
applicable in \$	Total agreed funding	-	-	5,696,315	3,231,827	2,077,141	797,122	489,181	385,000	341,200	113,000	0	13,130,786
	Total agency support cost	-	-	531,839	297,984	183,863	69,261	42,146	32,770	28,228	8,290	0	1,194,381
	Total cost to MLF	-	-	6,228,154	3,529,811	2,261,004	866,383	531,327	417,770	369,428	121,290	0	14,325,167

The funding for 2002 (for 2003 activities) was approved at the  $38^{th}$  ExCom and the funding for 2003 (for 2004 activities) was approved at the  $41^{st}$  ExCom.

#### 2. Compliance Analysis

Table 2 summarises the phase out or expected phase out in 2004 by UNIDO and UNDP as well as Government of Japan project being implemented by UNDP.

**Table 2 - 2004 Expected Phase Out** 

UN	IDO	UN	DP	Total	
Ongoing	New	Ongoing	New		
38.4	34.65	97.7	150.0	340.75	

From the Table 1 above, it can be noted that the maximum allowable consumption for 2003 is 3,352.7 ODP tonnes and for 2004, the maximum allowable consumption is 3,137.0 ODP Tonnes. Thus Nigeria's reported data for 2003 of 2662.40 ODP tonnes ensures that it is in compliance with the Plan and should be in compliance for 2004 also.

For 2005 there is a possibility of exceeding the maximum allowable consumption of 1,725.4 ODP Tonnes if the foam projects being executed by UNDP under the Plan get delayed too much. UNDP is taking all the possible steps to speed up the activity and is already doing long range planning to smooth any possible bottlenecks that may occur. Meanwhile, during validation visits, UNDP experts did provide actively formulation support and were able to reduce at least 150 ODP Tonnes CFC-11 through reformulation. UNDP is currently following up on this reformulation program to assure that the reductions achieved through formulation change are sustainable.

#### 3. Status of Ongoing Projects

#### 3.1 Refrigeration Manufacturing Sector UNIDO

All ongoing projects of UNIDO in the refrigeration manufacturing sector which were approved prior to the phase out plan have been completed by 2004.

Table 3 – 2003 and 2004 Phase Outs from UNIDO Projects

Inventory Number	Project Title	Phase Out (ODP T)
Completed in 2003		
NIR/REF/26/INV/44	Replacement of CFC-12 with HFC-134a and foam blowing agent CFC-11	39.5
	with cyclopentane in the manufacture of domestic refrigeration appliances at Kolinton Technical Industries	
NIR/REF/28/INV/48	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	16.1
1111/1E1/20/1111/40	CFC-11 with HCFC-141b in the manufacture of domestic refrigeration at	10.1
	Soesons Ltd.	
NIR/REF/28/INV/51	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	10.7
	CFC-11 with HCFC-141b in the manufacture of domestic refrigeration at	
	Onward Electrical Industry Ltd.	
NIR/REF/28/INV/52	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	9.6
	CFC-11 with HCFC-141b in the manufacture of domestic refrigeration at	
	United Technologies Ltd.	
Total phased out in 2	003	75.9
Completed in 2004		
NIR/REF/26/INV/30	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	19.1
	CFC-11 with cyclopentane in the manufacture of domestic refrigeration	
	appliances at A.G. Leventis	
NIR/REF/35/INV/97	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	8.3
	CFC-11 with HCFC-141b in the manufacture of commercial refrigeration	
	equipment at Polade	
NIR/REF/35/INV/98	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	11.0
	CFC-11 with HCFC-141b in the manufacture of domestic and commercial	
	refrigeration equipment at Ristian	
Total phased out in 2	004	38.4

#### 3.2 Foam Sector UNDP

All ongoing UNDP projects in the foam sector which were approved prior to the phase out plan will be completed in 2004, except one where the enterprise has declared bankruptcy and all equipment (including equipment supplied under the project) have been seized by the bank. UNOPS is working with the Government to resolve the issue. As the company is currently not producing, there is technically no ODS use.

Table 4 – 2003 and 2004 Phase Outs from UNDP Projects Approved before Plan

Inventory Number	mber Project Title			
Completed in 2003				
NIR/FOA/23/INV/25	Conversion to CFC-free technology in the manufacture of flexible polyurethane foam at Safa Foam Products (Nig) Ltd.	24.4		
NIR/FOA/26/INV/31	Phase-out of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Orbit Foam Ltd.	25.1		
NIR/FOA/26/INV/42	Phase-out of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Yinka-Oba Foam Nig. Ltd.	30.0		
NIR/FOA/28/INV/46	Phase-out of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam (slabstock) at United Foam Products Nig. Ltd.	25.0		
NIR/FOA/29/INV/55	Phase-out of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Rubez (Nig.) Ltd. (Current Foam)	21.9		
NIR/FOA/34/INV/85	Phasing out of CFC-11 in the manufacture of flexible slabstock foam by conversion to methylene chloride at Gasfa Industries Nig., Ltd. (Meka Foam)	40.5		
NIR/FOA/35/INV/94	Phasing out of CFC-11 in the manufacture of flexible slabstock foam by conversion to methylene chloride at Bamako Industrial, Ltd.	24.0		
NIR/FOA/35/INV/95	Phasing out of CFC-11 in the manufacture of rigid polyurethane foam by conversion to a combination of water and HCFC-141b based systems at Agric Services (Nig.), Ltd.	43.7		
NIR/FOA/35/INV/96	Conversion from CFC-11 to methylene chloride (MC) technology in the manufacture of flexible polyurethane at ten box-foam enterprises in Lagos area	199.2		
NIR/FOA/32/INV/74	Phasing out of CFC-11 in the manufacture of flexible slabstock foam at Mac-Vico (Nig.) Limited by conversion to methylene chloride (GOJ Bilateral executed by UNDP)	28.4		
NIR/FOA/32/INV/75	Phasing out of CFC-11 in the manufacture of flexible slabstock foam at Martchem Industries Limited (at 2 plants) by conversion to methylene chloride (GOJ Bilateral executed by UNDP)	38.4		
Total phased out in 2	003	500.6		
Completed or to be con	mpleted in 2004 (all technically completed)			
NIR/FOA/26/INV/32	Phase-out of CFC-11 by conversion to methylene chloride in the manufacture	21.0		
NIR/FOA/26/INV/35	of flexible polyurethane foam at Olufoam and Plastic Industries Ltd.  Phase-out of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Confidence Products and Services Ltd.	27.3		
NIR/FOA/34/INV/89	Phasing out of CFC-11 in the manufacture of flexible slabstock foam by conversion to methylene chloride at Harmony Foam Nigeria Ltd.	22.3		
NIR/FOA/32/INV/73	Phasing out of CFC-11 in the manufacture of flexible slabstock foam at Eastern Wrought Iron Limited by conversion to methylene chloride	27.1		
Total phase out in 200		97.7		
Unable to formally Co				
NIR/FOA/34/INV/91	Phasing out of CFC-11 in the manufacture of rigid polyurethane foam by conversion to a combination of water and HCFC-141b based systems at Global Plastic Industries, Ltd.	(4.7)		

#### 4. Status of UNIDO Components of Plan

#### 4.1 Aerosol Manufacturing Sector

- This activity was taken up in 2004 after the second tranche of funds was approved.
- The contract for provision of equipment and engineering for the use of HAP has been signed for two enterprises.
- Initial site visit of the contractor was conducted in July 2004.
- It is expected that 58 ODP tonnes of CFC will be phased out in 2005.

## 4.2 Refrigeration Manufacturing Sector

- The workshop for redesign of the refrigeration cycles was completed and the study tour to IKK 2003 show by representatives of enterprises was successfully conducted in 2003.
- The specification of necessary production facility and equipment for alternative refrigerant and the foam blowing agent was determined followed by bidding of the equipment.
- Major production facility and equipment have been delivered to the project sites and is being commissioned.
- It is expected that the ODS impact of the project, 34.65 ODP tonnes will be phased out by the end of 2004.

## 5. Status of UNDP Components of Plan

UNDP received the first tranche of funding in January 2003. In view of the reduced support cost, UNDP was unable to carry out implementation with UNOPS. Instead, the 'Direct Execution' modality was selected. UNDP's internal procedures were completed by May 2003. However, Nigeria went through elections in May 2003 and it was late July 2003 when the new Minister for Environment took office. The project document for the first tranche was signed in August 2003.

The second tranche of funds was requested and approved at the 41<sup>st</sup> Executive Committee meeting. The funds were received by UNDP in January 2004. The project document for the second tranche has been prepared, DEX approval obtained and submitted to the Government for signature.

#### 5.1 Management and Expert Support

- A Regional Project Coordinator has been based in Abuja, Nigeria from November 2003
- A National Coordinator has been recruited since January 2004 and manages the Ozone Programme Implementation and Management Unit (OPIAMU).
- An international expert for the foam sector has been contracted.
- An international expert for the Refrigeration service sector has been contracted.

## 5.2 Foam Sector

- Invitations for Expression of Interest by equipment suppliers were posted on the websites of UN Development Business and IAPSO. Responses to the first posting in April 2003 were not received due to miscommunication with UNDP Nigeria. Reposted in February 2004.
- Short list of vendors based on the evaluation of Expressions of Interest and roster of existing suppliers prepared.
- Equipment specifications for the box foam subproject and two rigid foam subprojects were finalised January 2004.
- Government of Nigeria required that 20%-25% of the box foam equipment should be locally manufactured.
- In view of this requirement, and since the budget allows only very elementary equipment which is not available in standard, proven format, it was decided to procure prototypes from three

- suppliers. The equipment, with the local content, would be evaluated and validated before bulk supply began.
- In view of the large quantity of box foam equipment required in a short time, it was decided to simultaneously procure from three equipment manufacturers.
- Invitations to Bid (ITB) were issued for the first tranche of equipment and bids received from 5 suppliers for the box foam equipment in April 2004.
- The Bid Analysis was completed in May 2004 after obtaining several clarifications from the bidders.
- Negotiations on technical issues were held in Lagos in June 2004 with the three lowest bidders and the BAR was finalised.
- One bidder advised that they already had 20%-25% local component on equipment earlier supplied against UNDP projects. The expert verified and confirmed this.
- The Technical Review Committee comprising Government of Nigeria, Federal Ministry of Environment (FMEnv), OPIAMU representative and UNDP-MPU representative reviewed the final Bid Analysis Report and recommended that orders be placed on the three suppliers with quantities based on an optimized delivery schedule. The committee also confirmed that the requirement for prototype be waived for the supplier with proven local content.
- The Contracts, Assets and Procurement Committee (CAP) of the UNDP Country Office convened in September 2004 and approved the recommendations of the expert and the Technical Review Committee. The documents have now been forwarded to UNDP New York for the final approval, which is expected by end October/early November.
- Purchase Orders are expected to be sent out within 2 weeks of receipt of approval from UNDP New York.
- Delivery of equipment will begin within 10 weeks thereafter.
- As soon as approval is received from New York, vendors will be asked to confirm that additional quantities of equipment for the second tranche can be supplied at the same price. If there is agreement, the process to increase the quantities will be started.
- ITBs for auxiliary equipment for the boxfoam units (safety related), as well as for the two rigid foam projects were sent out and bids received in May 2004.
- The BARs for these were finalised and were sent to the CAP of UNDP CO along with the boxfoam equipment documents.
- Purchase Orders are expected to be sent out within 2 weeks of receipt of approval from UNDP New York.
- Training workshop for the boxfoam enterprises in the first tranche to provide technical information and assistance are planned to be conducted later this year. The equipment is expected to be in place by June 2005. Next tranches will be implemented much faster as no further prototyping is required and the results from the current BAR—if accepted—can be applied.

#### 5.3 Refrigeration Service Sector

- Equipment specifications for the training equipment and second tranche recovery/recycling equipment will be finalised by mid October 2004.
- ITBs will be sent out immediately thereafter and bids received by mid November 2004.
- Bid Analysis, Technical Review and UNDP CO CAP review expected to be completed by end December, followed by request for approval from UNDP New York.
- Orders will be placed early 2005.
- Training of Trainers in Good Refrigerant Management Practices is expected to be completed by mid 2005.
- This will be followed by Training of Technicians across the country over the next several years.
- Recovery and Recycling equipment are to be phased in over a period of 3 years. After the first lot of equipment are distributed and put in use, the impact of recovery and recycling will be evaluated before procuring the rest of the equipment.

#### 5.4 Legislation and Customs Training

- A draft comprehensive import export licensing regulation for ODS was prepared.
- Stakeholders' workshops were held in August 2004.
- The final draft is under preparation before submission to the Government for approval.
- Training of Customs will start in 2005.

UNDP has sent a letter to the Federal Ministry of Environment requesting urgent attention to the matter and close follow up is being maintained.

#### 6. Methodology for Audit

Currently there is no binding requirement for importers and exporters to provide import/export data to the Government. Thus developing a methodology for independent audit to verify consumption limits is proving to be difficult. Once the legislation is in place, it will be possible to have a methodology to verify the data for each year.

In the meanwhile, some independent auditors are being identified and it is proposed to discuss the issue with them. Pending the finalisation and implementation of the legislation, UNDP proposes to suggest development of a sample audit procedure to understand whether such a procedure can come up with justifiable consumption verification.

#### 7. Comment

UNDP's change to a new accounting system, UNDP Country Office moving from Lagos to Abuja, first time involvement in procurement of high value technical equipment and ensuring due process is followed led to several procedural delays. However, with the experience gained from the foam equipment procurement exercise, it is felt that subsequent procurement requirements will move much faster.

## 8. 2005 Annual Implementation Programme and Release of 2004 Funding Tranche

The 2005 Annual Implementation Programme is attached in Annex 1, with a request to the ExCom for release of the third (2204) funding tranche, as below:

Table 5 – Funding Request for 2004 to be Implemented in 2005

Sector	Agency	Tranche Amount (US\$)	Agency Fees (US\$)	Total (US\$)
Foam	UNDP	1,500,000	133,800	1,633,800
Refrigeration Servicing	UNDP	577,141	50,063	627,204
		2,077,141	183,863	2,261,004

Release of this funding will enable completing procurement of all foam manufacturing equipment and ensure expected phase out for 2005 and 2006. The foam sector phase out will make compliance in future years much easier.

## NIGERIA NATIONAL CFC PHASE OUT PLAN 2005 Annual Implementation Programme

#### 1. Data

Country	Nigeria
Year of plan	2004
	(2005 implementation)
# of years completed	2
	(2002, 2003)
# of years remaining under the plan	6
	(2004-2009)
Target ODS consumption of the preceding year	3,137 t
	(2004)
Target ODS consumption of the year of plan	1,725.4 t
	(2005)
Level of funding requested	US\$ 2,077,141
Lead implementing agency	UNDP
Co-operating agency	UNIDO

## 2. Targets

Indicators		Preceding Year (2004)	Year of Plan (2005)	Reduction
Supply of	Import	3,137.0 ODP t	1,725.4 ODP t	215.7 ODP t
ODS	Production	n/a	n/a	n/a
	Total (1)	3,137.0 ODP t	1,725.4 ODP t	1,411.6 ODP t
Demand of	Manufacturing	2,322.4 ODP t	1,060.8 ODP t	1,261.6 ODP t
ODS	Servicing	814.6 ODP t	664.6 ODP t	150.0 ODP t
	Stock piling	n/a	n/a	n/a
	Total (2)	3,137.0 ODP t	1,725.4 ODP t	1,411.6 ODP t

## 3. **Industry Action**

Sector	Consumption Preceding Year (2004)	Consumption Year of Plan (2005)	Reduction within Year of Plan (2005)-(2004)	Number of Projects to be Completed	Number of Servicing Related Activities	ODS Phase-out (ODP t)	
		Man	ufacturing				
Aerosol	58.0	58.0	0	0		0	
Foam	2,195.4	813.1	1,382.3	*		1,382.3	
Refrigeration	69.0	45.4	23.6	*		23.6	
Total	2,322.4	916.5	1,405.9	*		1,405.9	
	Servicing						
Refrigeration	814.6	814.6	0			0	
Total	814.6	814.6	0			0	
GRAND TOTAL	3,137.0	1,731.1	1,405.9**			1,405.9	

Note: \* Includes ongoing and umbrella projects

++ Does not include reduction due to IS at \$12.1/kg

#### 4. Technical Assistance

#### 4.1 FOAM MANUFACTURING

Proposed Activity: Awareness Campaign

Objective: Ensure that every ODS user in the foam sector is aware of the phase-out

obligation in this sector and the possibility to participate in the program.

Continuing activity

Target Group: Foam sector Impact: No ODP impact.

**Proposed Activity:** Implementation Work Plans

Objective: Plan the implementation of the 2<sup>nd</sup> and 3<sup>rd</sup> phase in all details/prepare

specifications

Target Group: Eligible phase 3 recipients

Impact: No ODP impact

Proposed Activity: International procurement

Objective: Conduct invitation to bid/select bidder (if needed), place purchase order(s)

Target Group: Equipment manufacturers

Impact: No ODP impact.

**Proposed Activity:** Implementation Workshops

Objective: To confirm (i) the conversion plan, (ii) to present bidding results, (iii) to

document commitment and (iv) to collect any missing baseline information

Target Group: Eligible phase 3 recipients

Impact: No ODP impact.

Proposed Activity: Training, Technical Support
Objective: Introduce CFC-free formulations
Target Group: Eligible phase-3 recipients

Impact: Phaseout of 291.8 t CFCs/y at baseline conditions

#### 4.2 REFRIGERATION SERVICING

Proposed Activity: Training of Technicians in Good Refrigerant Management Practices

Objective: To train technicians.

Continuing activity

Target Group: R&AC Technicians

Impact: 1500 – 1800 R&AC technicians trained. No ODP impact.

Proposed Activity: R & R equipment ordered

Objective: Equip service companies with R&R equipment.

To be implemented.

Target Group: R&AC service companies

Impact: Equipment distributed. No ODP impact

#### 4. **Government Action**

The Control Measures listed below are under consideration. Some will definitely be implemented; the others have to be evaluated carefully before a final decision is taken.

Policy/Activity Planned	Schedule of Implementation
Control Measures under consideration are:	
Ban on new installations and equipment using ODS.	• 2005
• Provide import concessions and tax incentives to promote use of	• 2005
substitutes and alternative technologies, as well as for Recovery and	
Recycling equipment.	
• Establish an inventory of importers of ODS.	• 2005
Implementation of an ODS import quota system.	• 2005
• Certification of technicians/practitioners and/or establishing	• 2005
conditions for recognition of Associations, which can provide	
certification and enforce conditions.	

## 5. Budget for 2004 to be implemented in 2005

Activity	Planned Expenditures (US \$)
Foam Manufacturing Sector	
Equipment	1,470,000
Management Activities	30,000
FUNDING REQUIRED – FOAM MANUFACTURING SECTOR	1,500,000
Refrigeration Servicing Sector	
Training in Good Refrigerant Management Practices-Training of	
Technicians	
National Consultant	\$22,500
Travel, DSA & Communications for Cons.	\$10,500
Train the Technicians	
Awareness	\$20,000
Material	\$7,200
Organisation	\$72,000
Remuneration to Trainers	\$72,000
Total for Training of Technicians	\$204,200
Recovery & Recycling	
R&R Equipment	\$236,313
MAC Equipment	\$56,628
National Consultant	\$22,500
Travel, DSA & Communications for Cons.	\$10,500
Total for R&R & Equipment	\$325,941
Implementation & Management	
Steering Committee	\$5,000
IMU Staffing	\$35,000
Communication	\$2,000
Travel & DSA	\$5,000
<b>Total for Implementation Management</b>	\$47,000
FUNDING REQUIRED – REFIGERATION SERVICING SECTOR	\$577,141
TOTAL FUNDING REQUIRED IN 2004 FOR 2005 ACTIVITIES	\$2,077,141

## 6. Administrative Fees for 2004 program to be implemented in 2005

Agency	Amount
UNDP – Foam Manufacturing Sector	\$133,800
UNDP – Refrigeration Servicing Sector	\$50,063
TOTAL	\$183,863

UNITED NATIONS





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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Forty-fourth Meeting Prague, 29 November-3 December 2004

#### PROJECT PROPOSAL: NIGERIA

This document consists of the comments and recommendation of the Fund Secretariat on the following project proposal:

## Phase out

• National CFC phase-out plan (third tranche): the 2005 annual work programme

**UNDP** 

# PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS COUNTRY: NIGERIA

#### PROJECT TITLE

#### BILATERAL/IMPLEMENTING AGENCY

National CFC phase-out plan: (third tranche) the 2005 annual work programme

UNDP – Lead Implementing Agency UNIDO – Cooperating Implementing Agency Government of Japan – Cooperating Agency

#### **SUB-PROJECT TITLES**

(a) Foam sector phase-out plan	UNDP
(b) Refrigeration servicing sector phase-out plan including management	UNDP
(c) Refrigeration manufacturing sector phase-out Plan	UNIDO
(d) Aerosol Manufacturing sector Phase out Plan	UNIDO
(e) National information, education and communication campaign	Government of Japan

NATIONAL CO-ORDINATING AGENCY: National Ozone Office, Federal Ministry of Environment

#### LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT

A: ARTICLE-7 DATA (ODP TONNES, 2003, AS OF SEP 2004)

Annex A Group 1 Substances (CFCs) 2,662.40

#### B: COUNTRY PROGRAMME SECTORAL DATA (ODP TONNES, 2003, AS OF 1 JUNE 2004)

ODS	Foam	Ref.	Aerosol	ODS	Solvents	Process agent	Fumigant
CFC-11	1,825.70						
CFC-12		772.70	58.0				
CFC-114		3.0					
CFC-115		3.0					

CFC consumption remaining eligible for funding (ODP tonnes) nil

CURRENT YEAR BUSINESS PLAN: Total funding US \$ 2,261,000; total phase-out 407 ODP tonnes.

C	URKENT YEAR BUSINESS PLAN:	Total Tundin	g usaz,	,201,000:	totai pnase	e-out 407	ODP toni	ies.	
PROJECT	PROJECT DATA		2005	2006	2007	2008	2009	2010	Total
CFCs	Montreal Protocol limits	3,650	1,825	1,825	547.5	547.5	547.5	0	n.a.
	Annual consumption limit	3,137	1,725	1,016	508	286	86	0	n.a.
(ODP	Annual phase-out from ongoing projects	561	0	0	0	0	0	0	
tonnes)	Annual phase-out newly addressed	845	688	492	200	200	65	0	
	Annual unfunded phase-out	0	0	16.5	0	0	0	0	
	Phase out from IS and bilateral	5.7	21.5	0	21.5	0	21.5	0	
TOTAL O	DS CONSUMPTION TO BE PHASED OUT	1,412	710	508	222	200	86	0	
Total ODS	consumption to be phased-in (HCFCs)								
Project cost	as originally submitted (US \$)								
Final Proje	ect costs (US \$):								
I	Funding for lead agency UNDP	2,077,141	797,122	489,181	385,000	341,200	113,000	0	
I	Funding for UNIDO	0	0	0	0	0	0	0	
I	Funding for Govt. of Japan	0	0	0	0	0	0	0	
Ţ.	Fotal project funding	2,077,141	797,122	489,181	385,000	341,200	113,000	0	
Final Supp	ort costs (US \$))								
	Support cost for lead agency UNDP	183,863	69,261	42,146	32,770	28,228	8,290	0	
Support cost for UNIDO		0	0	0	0	0	0	0	
Support cost for Govt of Japan		0	0	0	0	0	0	0	
Total support costs		183,863	69,261	42,146	32,770	28,228	8,290	0	
TOTAL CO	OST TO MULTILATERAL FUND (US \$)	2,261,004	866,383	531,327	417,770	369,428	121,290	0	
Final projec	et cost effectiveness (US \$/kg)			•	•				5.27

FUNDING REQUEST: Approval of funding for 3rd tranche (2004) as indicated above.

SECRETARIAT'S	For individual consideration
RECOMMENDATION	

#### PROJECT DESCRIPTION

1. The Agreement for the National CFC Phase-Out Plan between the Government of Nigeria and the Executive Committee targets the total phase out of CFCs in the aerosol, foam and refrigeration manufacturing and servicing sectors by December 31, 2009. The agreement was approved in principle for a total funding level (including support cost) of US \$14,325,167 to be released in 8 tranches. UNDP, as the lead implementing agency, is responsible for the implementation activities in the foam manufacturing and refrigeration servicing sectors, as well as for overall management of the Plan. UNIDO is responsible for the aerosol and refrigeration manufacturing sectors. The government of Japan will assist in the national information, education and communication campaign. The breakdown of approved funding, disbursement schedule and annual CFC consumption and phase-out targets, as per the Agreement, is shown below.

<u>Table 1 - Approved Funding, Disbursement Schedule and Annual CFC Consumption</u> and Phase-out Targets, as per the Agreement

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL
Montreal consumpt (ODP ton		3,650	3,650	3,650	3,650	3,650	1,825	1,825	547.5	547.5	547.5	0	n/a
Reported/I Consumpt tonnes		4094.8*	4,115.5	3,686.2	-	-	-	-	-	-	-	-	-
Maximun total cons (ODP ton	umption	-	-	-	3,352.7	3,137.0	1,725.4	1,015.9	507.6	286.1	86.1	0	-
	from ongoing ODP tonnes)	171.3	429.3	333.5	194.2	560.7	0.0	0.0	0.0	0.0	0.0	0	1689
plan (ODP		0.0	0.0	0.0	0.0	845.3	688.0	491.8	200.0	200.0	64.6	0	2,489.7
	(ODP tonnes)	0.0	0.0	0.0	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0	16.5
	t @\$12.1 per onnes) and	0.0	0.0	0.0	21.5	5.7	21.5	0.0	21.5	0.0	21.5	0	91.7
	al reduction	171.3	429.3	333.5	215.7	1,411.6	709.5	508.3	221.5	200.0	86.1	0	4,286.8
	UNDP agreed funding	-	-	5,013,929	2,976,827	2,077,141	797,122	489,181	385,000	341,200	113,000	0	12,193,400
	UNDP support costs	-	-	449,318	264,834	183,863	69,261	42,146	32,770	28,228	8,290	0	1,078,710
Annual funding instal-	UNIDO agreed funding	-	1	682,386	255,000	-	-	1	1	1	1	0	937,386
ments where	UNIDO support cost	-	1	82,521	33,150	-	-	-	-	-	1	0	115,671
applicable in US \$	funding	-	-	5,696,315	3,231,827	2,077,141	797,122	489,181	385,000	341,200	113,000	0	13,130,786
	Total agency support cost	ı	1	531,839	,	183,863	69,261	42,146	32,770	28,228		0	1,194,381
	Total cost to MLF	-	-	6,228,154	3,529,811	2,261,004	866,383	531,327	417,770	369,428	121,290	0	14,325,167

- 2. The funding in 2002 (for 2003 activities) was approved at the 38th Meeting of the Executive Committee and the funding in 2003 (for 2004 activities) was approved at the 41<sup>st</sup> Meeting of the Executive Committee.
- 3. The maximum allowable consumption in 2003 was 3,352.7 ODP tonnes.
- 4. UNDP, as the lead implementing agency, submitted on behalf of the Government of Nigeria the progress report on activities implemented in 2003-2004 and the 2005 Work Plan with the request for funding of the third tranche at US \$2,077,141.
- 5. According to the progress report, all ongoing projects in the foam and refrigeration manufacturing sectors approved for UNDP and UNIDO prior to the approval of the national CFC phase-out plan have been completed in 2004 except one, where the enterprise has declared bankruptcy and all equipment (including equipment supplied under the project) has been seized by the bank. UNOPS is working with the Government to resolve the issue. As the company is currently not producing, there is no CFC consumption at this enterprise. The total CFC phase-out from completion of ongoing projects was 576.5 ODP tonnes in 2003 and 140.8 ODP tonnes in 2004
- 6. <u>In the aerosol manufacturing sector</u>, under the Plan, UNIDO signed the contract for provision of equipment and engineering for the use of hydrocarbon aerosol propellants in two enterprises. The contractor's initial site visit was conducted in July 2004. It is expected that 58 ODP tonnes of CFC will be phased out in 2005.
- 7. <u>In the refrigeration manufacturing sector</u>, under the Plan, all the preparatory work has been completed in 2003. Major production equipment has been delivered to the project sites and is being commissioned. It is expected that 34.65 ODP tonnes will be phased out by the end of 2004.
- 8. The implementation of UNDP activities in the foam and refrigeration servicing sectors was delayed due to difficulties associated with a higher than expected UNOPS agency fee and elections in Nigeria. The project document for the first funding tranche was signed in August 2003. A training workshop for the foam enterprises is planned to be conducted later this year. The equipment is expected to be in place by June 2005. Coming tranches will be implemented much faster as no further prototyping is required.
- 9. Equipment specifications for the training equipment and recovery/recycling equipment will be finalized by mid October 2004. Training of Trainers in Good Refrigerant Management Practices is expected to be completed by mid 2005. This will be followed by Training of Technicians across the country over the next several years. Recovery and Recycling equipment is to be distributed and installed over a period of 3 years. After the first batch of equipment is distributed and put in use, the impact of recovery and recycling will be evaluated before procuring the rest of the equipment.
- 10. Under the Legislation and Customs Training component, a draft of comprehensive import/export licensing regulations for ODS was prepared. Workshops involving major stakeholders were held in August 2004. The final draft is under preparation before submission to

the Government for approval. UNDP has sent a letter to the Federal Ministry of Environment requesting urgent attention to the matter, and close follow-up is being maintained. Training of Customs officers is planned to start in 2005.

11. Expected CFC phase-out in 2004 from ongoing and new projects is estimated at 340.75 ODP tonnes. According to the progress report, there is currently no binding requirement for importers and exporters to provide import/export data to the Government. Thus, the development of a methodology for independent auditing to verify consumption limits is proving to be difficult. Once the legislation is in place, it will be possible to have a methodology to verify the data for each year. Meanwhile, some independent auditors are being identified and it is proposed to discuss the issue with them. Pending the finalization and implementation of the legislation, UNDP has proposed development of a sample audit procedure to understand whether such a procedure can come up with justifiable consumption verification.

## 2005 Annual Implementation Programme

- 12. The 2005 annual implementation programme contains planning activities to be implemented by UNDP in the foam and refrigeration servicing sectors. No new activities are envisaged for UNIDO in the aerosol and refrigeration manufacturing sectors. Estimated CFC consumption of 3,137 ODP tonnes in 2004, based on the allowable limit included in the Agreement, is expected to be reduced by 1,411.6 ODP tonnes to 1,725.4 ODP tonnes in 2005. The proposed activities cover the organization of industry workshops, procurement of equipment, training in the foam industry and of refrigeration servicing technicians, and awareness campaigns in the foam manufacturing sector. In 2005, policy development activities at the Government level will address:
  - (a) ban on new installations and equipment using ODS;
  - (b) import concessions and tax incentives to promote the use of substitutes and alternative technologies, as well as for Recovery and Recycling equipment;
  - (c) establishment of an inventory ODS importers;
  - (d) implementation of an ODS import quota system;
  - (e) certification of technicians and/or establishing conditions for recognition of professional associations, which can provide certification.

#### Requested budget

13. The 2005 annual implementation programme contains the 2005 budget of US \$2,077,141 for the implementation of the proposed activities and US \$183,863 in support costs for UNDP.

#### SECRETARIAT'S COMMENTS AND RECOMMENDATION

#### **COMMENTS**

- 14. Article 7 CFC consumption data of 2,662.4 ODP tonnes have been reported to the Ozone Secretariat for the year 2003. According to the Agreement, the maximum total allowable CFC consumption in 2003 is 3,352.7 ODP tonnes. On the basis of reported data, the consumption limit specified in the Agreement was achieved.
- 15. The requested funding of US \$2,077,141 for the implementation of the proposed activities and US \$183,863 in UNDP support costs corresponds to the 2005 funding instalment contained in the Agreement.
- 16. The Secretariat, in reviewing the progress report, drew UNDP's attention to requirements to establish a system to conduct an independent audit of CFC phase-out and consumption in the country. The Secretariat pointed out that the 41st Meeting of the Executive Committee, in considering the release of the second tranche for Nigeria, requested UNDP to make provisions in the 2004 annual implementation programme for the development of methodology for an independent audit to be used to verify consumption limits for 2003 and subsequent years as required under the agreement on the national CFC phase-out plan. (Decision 41/57)
- 17. The current status of independent auditing of CFC consumption data is described in Paragraph 10 above. Additionally, UNDP clarified that, currently, the legislation is at the draft stage and UNDP is working with the Ministry of Environment to accelerate the adoption of the necessary regulations establishing the import quota system. In the absence of legislation, UNDP has been undertaking the development of verification procedures involving importers identified with the assistance of the customs office. UNDP started the process of selecting independent officers.
- 18. It appears from the 2004 progress report that the conditions in the Agreement between the Executive Committee and the Government of Nigeria in relation to the verification of established targets have not been fully complied with. Additionally, the requirements of Decision 41/57 do not appear to have been met.
- 19. In reviewing the 2005 annual work programme, the Secretariat noticed that performance indicators such as consumption in the preceding year (2004) and the reduction target reflecting the difference in consumption between 2004 and 2005 are exactly the same as the targets reflected in the Agreement. As per the Agreement, the 2004 consumption limit is 3,137 ODP tonnes. It should be noted that reported actual consumption for 2003 was lower than the 2003 maximum allowable limit incorporated in the Agreement by 689.6 ODP tonnes. The reduction achieved during 2004 is estimated at about 340 ODP tonnes. It appears that 2004 consumption is expected to be about 800 ODP tonnes lower than the 2004 allowable limit reflected in the Agreement.
- 20. Similarly, the reduction target included in the 2005 work programme is equal to the 2004 annual reduction of 1,411.6 ODP tonnes included in the Agreement. This target, however, could

not realistically be achieved through activities already undertaken and to be undertaken in 2004, because the expected consumption in 2004 would be much lower than the value reflected in the Agreement.

21. The Secretariat proposed that UNDP make the necessary adjustments to the 2005 work programme. UNDP has revised the 2005 work programme on the basis of actual CFC consumption in 2003 and estimated consumption in 2004. Reduction targets have been adjusted respectively. The 2005 CFC consumption target remains the same as per the Agreement.

#### RECOMMENDATION

22. The Executive Committee may wish to consider the approval of the 2005 annual work programme and the requested tranche of funding in light of the information provided above.

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# PROJECT COVER SHEET – MULTI-YEAR PROJECTS COUNTRY: NIGERIA

#### PROJECT TITLE

#### BILATERAL/IMPLEMENTING AGENCY

National CFC Phaseout Plan in Nigeria

SUB-PROJECT TITLES

UNDP – Lead Implementing Agency UNIDO – Cooperating Implementing Agency Government of Japan – Cooperating Agency

(a) Foam Sector Phase Out Plan

(b) Refrigeration Servicing Sector Phaseout Plan including Management

(c) Refrigeration Manufacturing Sector Phaseout Plan

(d) Aerosol Manufacturing sector Phaseout Plan

(e) National information, education and communication campaign

UNDP UNDP

UNIDO UNIDO

Government of Japan

NATIONAL CO-ORDINATING AGENCY: National Ozone Office, Federal Ministry of Environment

#### LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT

A: ARTICLE-7 DATA (ODP TONNES, 2003, AS OF SEP 2004)

Annex A Group 1 Substances (CFCs) 2,662.40

#### B: COUNTRY PROGRAMME SECTORAL DATA (ODP TONNES, 2003, AS OF 1 JUNE 2004)

ODS	Foam	Ref.	Aerosol	ODS	Solvents	Process agent	Fumigant
CFC-11	1,825.70						
CFC-12		772.70	58.0				
CFC-114		3.0					
CFC-115		3.0					

CFC consumption remaining eligible for funding (ODP tonnes) 2,662.40

**CURRENT YEAR BUSINESS PLAN:** Total funding US \$ million: total phase-out ODP tonnes. PROJECT DATA 2005 2006 2007 2008 2009 2010 Total Montreal Protocol limits 3,650 1,825 547.5 547.5 **CFCs** 1,825 547.5 0 3,137 1,725 1,016 508 286 0 Annual consumption limit 86 n.a. (ODP 0 0 0 Annual phase-out from ongoing projects 561 0 0 0 tonnes) Annual phase-out newly addressed 845 688 492 200 200 65 0 Annual unfunded phase-out 0 16.5 0 0 0 0 0 Phase out from IS and bilateral 5.7 21.5 21.5 0 21.5 710 508 200 TOTAL ODS CONSUMPTION TO BE PHASED OUT 1,412 222 86 Total ODS consumption to be phased-in (HCFCs) Project cost as originally submitted (US \$) Final Project costs (US \$): Funding for lead agency UNDP 2,077,141 797,122 489,181 385,000 341,200 113,000 0 Funding for UNIDO 0 0 0 0 0 0 0 Funding for Govt. of Japan 0 0 0 0 0 0 0 2,077,141 Total project funding 797,122 489,181 385,000 341,200 113,000 0 Final Support costs (US \$)) Support cost for lead agency UNDP 32,770 8,290 0 183,863 69,261 42,146 28,228 Support cost for UNIDO 0 0 0 0 0 0 0 0 0 Support cost for Govt of Japan 0 0 0 0 0 **Total support costs** 183,863 69.261 42,146 32,770 28,228 8.290 0 TOTAL COST TO MULTILATERAL FUND (US \$) 2.261.004 866,383 531.327 417,770 121.290 0 Final project cost effectiveness (US \$/kg) 5.27

FUNDING REQUEST: Approval of funding for 3RD tranche (2004) as indicated above.

## **NIGERIA**

## **National CFC Phase-Out Plan**

Report on 2003/2004 Implementation 2005 Annual Implementation Programme and Request for Release of the Third Funding Tranche

> Prepared Jointly By: UNDP (Lead Agency) UNIDO (Cooperating Agency)

## NIGERIA NATIONAL CFC PHASE-OUT PLAN

#### Report on 2003/2004 Implementation

## 1. Background

The Agreement for the National CFC Phase-Out Plan for Nigeria between the Government of Nigeria and the Executive Committee of the Multilateral Fund (UNEP/OzL.Pro/ExCom/38/70/Rev.1 Annex XII) covers the total phase out of CFCs in the Aerosol, Foam and Refrigeration Manufacturing and Servicing sectors by December 31, 2009. The maximum allowable consumption in 2003 was 3,352.7 ODP tonnes. The agreement was approved for a total funding level (including support cost) of \$14,325,167 to be released in 8 tranches.

UNDP as the lead agency would be responsible for the Foam manufacturing and refrigeration servicing sector as well as the management. UNIDO would be responsible for the Aerosol and Refrigeration manufacturing sectors. Government of Japan would assist in the National information, education and communication campaign. It should be noted that the funding from Government of Japan has been converted to notional ODP tonnes reduced using the \$12.1/kg formula as is the case with the Institutional strengthening projects.

The breakdown of the approved funding, disbursement schedule and annual CFC consumption and phaseout targets, as per the Agreement is shown below.

Table 1 - Approved Funding, Disbursement Schedule and Annual CFC Consumption and Phase-out Targets, as per the Agreement

			,	8	cis, as p	<u> </u>	8			,	,		
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL
Montreal Proconsumption (ODP tonnes	limits	3,650	3,650	3,650	3,650	3,650	1,825	1,825	547.5	547.5	547.5	0	n/a
Reported/Exp Consumption		4094.8*	4,115.5	3,686.2	-	-	-	-	-	-	-	-	-
Maximum al consumption (ODP tonnes		-	-	-	3,352.7	3,137.0	1,725.4	1,015.9	507.6	286.1	86.1	0	-
Reduction fro projects (ODI		171.3	429.3	333.5	194.2	560.7	0.0	0.0	0.0	0.0	0.0	0	1689
New reductio (ODP tonnes)		0.0	0.0	0.0	0.0	845.3	688.0	491.8	200.0	200.0	64.6	0	2,489.7
Ineligible OD tonnes)	OS reduction (ODP	0.0	0.0	0.0	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0	16.5
	r I.S. component ag (ODP tonnes) ateral	0.0	0.0	0.0	21.5	5.7	21.5	0.0	21.5	0.0	21.5	0	91.7
Total annual	reduction	171.3	429.3	333.5	215.7	1,411.6	709.5	508.3	221.5	200.0	86.1	0	4,286.8
	UNDP agreed funding	-	-	5,013,929	2,976,827	2,077,141	797,122	489,181	385,000	341,200	113,000	0	12,193,400
	UNDP support	-	-	449,318	264,834	183,863	69,261	42,146	32,770	28,228	8,290	0	1,078,710
Annual funding	UNIDO agreed funding	-	-	682,386	255,000	-	-	-	-	-	-	0	937,386
instalments where	UNIDO support	-	-	82,521	33,150	-	-	-	-	-	-	0	115,671
applicable in \$	Total agreed funding	-	-	5,696,315	3,231,827	2,077,141	797,122	489,181	385,000	341,200	113,000	0	13,130,786
	Total agency support cost	-	-	531,839	297,984	183,863	69,261	42,146	32,770	28,228	8,290	0	1,194,381
	Total cost to MLF	-	-	6,228,154	3,529,811	2,261,004	866,383	531,327	417,770	369,428	121,290	0	14,325,167

The funding for 2002 (for 2003 activities) was approved at the  $38^{th}$  ExCom and the funding for 2003 (for 2004 activities) was approved at the  $41^{st}$  ExCom.

#### 2. Compliance Analysis

Table 2 summarises the phase out or expected phase out in 2004 by UNIDO and UNDP as well as Government of Japan project being implemented by UNDP.

**Table 2 - 2004 Expected Phase Out** 

UN	IDO	UN	Total	
Ongoing	New	Ongoing	New	
38.4	34.65	97.7	150.0	340.75

From the Table 1 above, it can be noted that the maximum allowable consumption for 2003 is 3,352.7 ODP tonnes and for 2004, the maximum allowable consumption is 3,137.0 ODP Tonnes. Thus Nigeria's reported data for 2003 of 2662.40 ODP tonnes ensures that it is in compliance with the Plan and should be in compliance for 2004 also.

For 2005 there is a possibility of exceeding the maximum allowable consumption of 1,725.4 ODP Tonnes if the foam projects being executed by UNDP under the Plan get delayed too much. UNDP is taking all the possible steps to speed up the activity and is already doing long range planning to smooth any possible bottlenecks that may occur. Meanwhile, during validation visits, UNDP experts did provide actively formulation support and were able to reduce at least 150 ODP Tonnes CFC-11 through reformulation. UNDP is currently following up on this reformulation program to assure that the reductions achieved through formulation change are sustainable.

#### 3. Status of Ongoing Projects

#### 3.1 Refrigeration Manufacturing Sector UNIDO

All ongoing projects of UNIDO in the refrigeration manufacturing sector which were approved prior to the phase out plan have been completed by 2004.

Table 3 – 2003 and 2004 Phase Outs from UNIDO Projects

Inventory Number	Project Title	Phase Out (ODP T)
Completed in 2003		
NIR/REF/26/INV/44	Replacement of CFC-12 with HFC-134a and foam blowing agent CFC-11	39.5
	with cyclopentane in the manufacture of domestic refrigeration appliances at Kolinton Technical Industries	
NIR/REF/28/INV/48	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	16.1
1111/1E1/20/1111/40	CFC-11 with HCFC-141b in the manufacture of domestic refrigeration at	10.1
	Soesons Ltd.	
NIR/REF/28/INV/51	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	10.7
	CFC-11 with HCFC-141b in the manufacture of domestic refrigeration at	
	Onward Electrical Industry Ltd.	
NIR/REF/28/INV/52	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	9.6
	CFC-11 with HCFC-141b in the manufacture of domestic refrigeration at	
	United Technologies Ltd.	
Total phased out in 2	003	75.9
Completed in 2004		
NIR/REF/26/INV/30	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	19.1
	CFC-11 with cyclopentane in the manufacture of domestic refrigeration	
	appliances at A.G. Leventis	
NIR/REF/35/INV/97	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	8.3
	CFC-11 with HCFC-141b in the manufacture of commercial refrigeration	
	equipment at Polade	
NIR/REF/35/INV/98	Replacement of refrigerant CFC-12 with HFC-134a and foam blowing agent	11.0
	CFC-11 with HCFC-141b in the manufacture of domestic and commercial	
	refrigeration equipment at Ristian	
Total phased out in 2	004	38.4

#### 3.2 Foam Sector UNDP

All ongoing UNDP projects in the foam sector which were approved prior to the phase out plan will be completed in 2004, except one where the enterprise has declared bankruptcy and all equipment (including equipment supplied under the project) have been seized by the bank. UNOPS is working with the Government to resolve the issue. As the company is currently not producing, there is technically no ODS use.

Table 4 – 2003 and 2004 Phase Outs from UNDP Projects Approved before Plan

Inventory Number	Project Title	Phase Out (ODP T)
Completed in 2003		
NIR/FOA/23/INV/25	Conversion to CFC-free technology in the manufacture of flexible polyurethane foam at Safa Foam Products (Nig) Ltd.	24.4
NIR/FOA/26/INV/31	Phase-out of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Orbit Foam Ltd.	25.1
NIR/FOA/26/INV/42	Phase-out of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Yinka-Oba Foam Nig. Ltd.	30.0
NIR/FOA/28/INV/46	Phase-out of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam (slabstock) at United Foam Products Nig. Ltd.	25.0
NIR/FOA/29/INV/55	Phase-out of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Rubez (Nig.) Ltd. (Current Foam)	21.9
NIR/FOA/34/INV/85	Phasing out of CFC-11 in the manufacture of flexible slabstock foam by conversion to methylene chloride at Gasfa Industries Nig., Ltd. (Meka Foam)	40.5
NIR/FOA/35/INV/94	Phasing out of CFC-11 in the manufacture of flexible slabstock foam by conversion to methylene chloride at Bamako Industrial, Ltd.	24.0
NIR/FOA/35/INV/95	Phasing out of CFC-11 in the manufacture of rigid polyurethane foam by conversion to a combination of water and HCFC-141b based systems at Agric Services (Nig.), Ltd.	43.7
NIR/FOA/35/INV/96	Conversion from CFC-11 to methylene chloride (MC) technology in the manufacture of flexible polyurethane at ten box-foam enterprises in Lagos area	199.2
NIR/FOA/32/INV/74	Phasing out of CFC-11 in the manufacture of flexible slabstock foam at Mac-Vico (Nig.) Limited by conversion to methylene chloride (GOJ Bilateral executed by UNDP)	28.4
NIR/FOA/32/INV/75	Phasing out of CFC-11 in the manufacture of flexible slabstock foam at Martchem Industries Limited (at 2 plants) by conversion to methylene chloride (GOJ Bilateral executed by UNDP)	38.4
Total phased out in 2	003	500.6
Completed or to be con	mpleted in 2004 (all technically completed)	
NIR/FOA/26/INV/32	Phase-out of CFC-11 by conversion to methylene chloride in the manufacture	21.0
NIR/FOA/26/INV/35	of flexible polyurethane foam at Olufoam and Plastic Industries Ltd.  Phase-out of CFC-11 by conversion to methylene chloride in the manufacture of flexible polyurethane foam at Confidence Products and Services Ltd.	27.3
NIR/FOA/34/INV/89	Phasing out of CFC-11 in the manufacture of flexible slabstock foam by conversion to methylene chloride at Harmony Foam Nigeria Ltd.	22.3
NIR/FOA/32/INV/73	Phasing out of CFC-11 in the manufacture of flexible slabstock foam at Eastern Wrought Iron Limited by conversion to methylene chloride	27.1
Total phase out in 200		97.7
Unable to formally Co		
NIR/FOA/34/INV/91	Phasing out of CFC-11 in the manufacture of rigid polyurethane foam by conversion to a combination of water and HCFC-141b based systems at Global Plastic Industries, Ltd.	(4.7)

#### 4. Status of UNIDO Components of Plan

#### 4.1 Aerosol Manufacturing Sector

- This activity was taken up in 2004 after the second tranche of funds was approved.
- The contract for provision of equipment and engineering for the use of HAP has been signed for two enterprises.
- Initial site visit of the contractor was conducted in July 2004.
- It is expected that 58 ODP tonnes of CFC will be phased out in 2005.

## 4.2 Refrigeration Manufacturing Sector

- The workshop for redesign of the refrigeration cycles was completed and the study tour to IKK 2003 show by representatives of enterprises was successfully conducted in 2003.
- The specification of necessary production facility and equipment for alternative refrigerant and the foam blowing agent was determined followed by bidding of the equipment.
- Major production facility and equipment have been delivered to the project sites and is being commissioned.
- It is expected that the ODS impact of the project, 34.65 ODP tonnes will be phased out by the end of 2004.

## 5. Status of UNDP Components of Plan

UNDP received the first tranche of funding in January 2003. In view of the reduced support cost, UNDP was unable to carry out implementation with UNOPS. Instead, the 'Direct Execution' modality was selected. UNDP's internal procedures were completed by May 2003. However, Nigeria went through elections in May 2003 and it was late July 2003 when the new Minister for Environment took office. The project document for the first tranche was signed in August 2003.

The second tranche of funds was requested and approved at the 41<sup>st</sup> Executive Committee meeting. The funds were received by UNDP in January 2004. The project document for the second tranche has been prepared, DEX approval obtained and submitted to the Government for signature.

#### 5.1 Management and Expert Support

- A Regional Project Coordinator has been based in Abuja, Nigeria from November 2003
- A National Coordinator has been recruited since January 2004 and manages the Ozone Programme Implementation and Management Unit (OPIAMU).
- An international expert for the foam sector has been contracted.
- An international expert for the Refrigeration service sector has been contracted.

## 5.2 Foam Sector

- Invitations for Expression of Interest by equipment suppliers were posted on the websites of UN Development Business and IAPSO. Responses to the first posting in April 2003 were not received due to miscommunication with UNDP Nigeria. Reposted in February 2004.
- Short list of vendors based on the evaluation of Expressions of Interest and roster of existing suppliers prepared.
- Equipment specifications for the box foam subproject and two rigid foam subprojects were finalised January 2004.
- Government of Nigeria required that 20%-25% of the box foam equipment should be locally manufactured.
- In view of this requirement, and since the budget allows only very elementary equipment which is not available in standard, proven format, it was decided to procure prototypes from three

- suppliers. The equipment, with the local content, would be evaluated and validated before bulk supply began.
- In view of the large quantity of box foam equipment required in a short time, it was decided to simultaneously procure from three equipment manufacturers.
- Invitations to Bid (ITB) were issued for the first tranche of equipment and bids received from 5 suppliers for the box foam equipment in April 2004.
- The Bid Analysis was completed in May 2004 after obtaining several clarifications from the bidders.
- Negotiations on technical issues were held in Lagos in June 2004 with the three lowest bidders and the BAR was finalised.
- One bidder advised that they already had 20%-25% local component on equipment earlier supplied against UNDP projects. The expert verified and confirmed this.
- The Technical Review Committee comprising Government of Nigeria, Federal Ministry of Environment (FMEnv), OPIAMU representative and UNDP-MPU representative reviewed the final Bid Analysis Report and recommended that orders be placed on the three suppliers with quantities based on an optimized delivery schedule. The committee also confirmed that the requirement for prototype be waived for the supplier with proven local content.
- The Contracts, Assets and Procurement Committee (CAP) of the UNDP Country Office convened in September 2004 and approved the recommendations of the expert and the Technical Review Committee. The documents have now been forwarded to UNDP New York for the final approval, which is expected by end October/early November.
- Purchase Orders are expected to be sent out within 2 weeks of receipt of approval from UNDP New York.
- Delivery of equipment will begin within 10 weeks thereafter.
- As soon as approval is received from New York, vendors will be asked to confirm that additional quantities of equipment for the second tranche can be supplied at the same price. If there is agreement, the process to increase the quantities will be started.
- ITBs for auxiliary equipment for the boxfoam units (safety related), as well as for the two rigid foam projects were sent out and bids received in May 2004.
- The BARs for these were finalised and were sent to the CAP of UNDP CO along with the boxfoam equipment documents.
- Purchase Orders are expected to be sent out within 2 weeks of receipt of approval from UNDP New York.
- Training workshop for the boxfoam enterprises in the first tranche to provide technical information and assistance are planned to be conducted later this year. The equipment is expected to be in place by June 2005. Next tranches will be implemented much faster as no further prototyping is required and the results from the current BAR—if accepted—can be applied.

#### 5.3 Refrigeration Service Sector

- Equipment specifications for the training equipment and second tranche recovery/recycling equipment will be finalised by mid October 2004.
- ITBs will be sent out immediately thereafter and bids received by mid November 2004.
- Bid Analysis, Technical Review and UNDP CO CAP review expected to be completed by end December, followed by request for approval from UNDP New York.
- Orders will be placed early 2005.
- Training of Trainers in Good Refrigerant Management Practices is expected to be completed by mid 2005.
- This will be followed by Training of Technicians across the country over the next several years.
- Recovery and Recycling equipment are to be phased in over a period of 3 years. After the first lot of equipment are distributed and put in use, the impact of recovery and recycling will be evaluated before procuring the rest of the equipment.

#### 5.4 Legislation and Customs Training

- A draft comprehensive import export licensing regulation for ODS was prepared.
- Stakeholders' workshops were held in August 2004.
- The final draft is under preparation before submission to the Government for approval.
- Training of Customs will start in 2005.

UNDP has sent a letter to the Federal Ministry of Environment requesting urgent attention to the matter and close follow up is being maintained.

#### 6. Methodology for Audit

Currently there is no binding requirement for importers and exporters to provide import/export data to the Government. Thus developing a methodology for independent audit to verify consumption limits is proving to be difficult. Once the legislation is in place, it will be possible to have a methodology to verify the data for each year.

In the meanwhile, some independent auditors are being identified and it is proposed to discuss the issue with them. Pending the finalisation and implementation of the legislation, UNDP proposes to suggest development of a sample audit procedure to understand whether such a procedure can come up with justifiable consumption verification.

#### 7. Comment

UNDP's change to a new accounting system, UNDP Country Office moving from Lagos to Abuja, first time involvement in procurement of high value technical equipment and ensuring due process is followed led to several procedural delays. However, with the experience gained from the foam equipment procurement exercise, it is felt that subsequent procurement requirements will move much faster.

## 8. 2005 Annual Implementation Programme and Release of 2004 Funding Tranche

The 2005 Annual Implementation Programme is attached in Annex 1, with a request to the ExCom for release of the third (2204) funding tranche, as below:

Table 5 – Funding Request for 2004 to be Implemented in 2005

Sector	Agency	Tranche Amount (US\$)	Agency Fees (US\$)	Total (US\$)
Foam	UNDP	1,500,000	133,800	1,633,800
Refrigeration Servicing	UNDP	577,141	50,063	627,204
		2,077,141	183,863	2,261,004

Release of this funding will enable completing procurement of all foam manufacturing equipment and ensure expected phase out for 2005 and 2006. The foam sector phase out will make compliance in future years much easier.

## NIGERIA NATIONAL CFC PHASE OUT PLAN 2005 Annual Implementation Programme

#### 1. Data

Country	Nigeria
Year of plan	2004
	(2005 implementation)
# of years completed	2
	(2002, 2003)
# of years remaining under the plan	6
	(2004-2009)
Target ODS consumption of the preceding year	3,137 t
	(2004)
Target ODS consumption of the year of plan	1,725.4 t
	(2005)
Level of funding requested	US\$ 2,077,141
Lead implementing agency	UNDP
Co-operating agency	UNIDO

## 2. Targets

Indicators		Preceding Year (2004)	Year of Plan (2005)	Reduction
Supply of	Import	3,137.0 ODP t	1,725.4 ODP t	215.7 ODP t
ODS	Production	n/a	n/a	n/a
	Total (1)	3,137.0 ODP t	1,725.4 ODP t	1,411.6 ODP t
Demand of	Manufacturing	2,322.4 ODP t	1,060.8 ODP t	1,261.6 ODP t
ODS	Servicing	814.6 ODP t	664.6 ODP t	150.0 ODP t
	Stock piling	n/a	n/a	n/a
	Total (2)	3,137.0 ODP t	1,725.4 ODP t	1,411.6 ODP t

## 3. **Industry Action**

Sector	Consumption Preceding Year (2004)	Consumption Year of Plan (2005)	Reduction within Year of Plan (2005)-(2004)	Number of Projects to be Completed	Number of Servicing Related Activities	ODS Phase-out (ODP t)
Manufacturing						
Aerosol	58.0	58.0	0	0		0
Foam	2,195.4	813.1	1,382.3	*		1,382.3
Refrigeration	69.0	45.4	23.6	*		23.6
Total	2,322.4	916.5	1,405.9	*		1,405.9
Servicing						
Refrigeration	814.6	814.6	0			0
Total	814.6	814.6	0			0
GRAND TOTAL	3,137.0	1,731.1	1,405.9**			1,405.9

Note: \* Includes ongoing and umbrella projects

++ Does not include reduction due to IS at \$12.1/kg

#### 4. Technical Assistance

#### 4.1 FOAM MANUFACTURING

Proposed Activity: Awareness Campaign

Objective: Ensure that every ODS user in the foam sector is aware of the phase-out

obligation in this sector and the possibility to participate in the program.

Continuing activity

Target Group: Foam sector Impact: No ODP impact.

**Proposed Activity:** Implementation Work Plans

Objective: Plan the implementation of the 2<sup>nd</sup> and 3<sup>rd</sup> phase in all details/prepare

specifications

Target Group: Eligible phase 3 recipients

Impact: No ODP impact

Proposed Activity: International procurement

Objective: Conduct invitation to bid/select bidder (if needed), place purchase order(s)

Target Group: Equipment manufacturers

Impact: No ODP impact.

**Proposed Activity:** Implementation Workshops

Objective: To confirm (i) the conversion plan, (ii) to present bidding results, (iii) to

document commitment and (iv) to collect any missing baseline information

Target Group: Eligible phase 3 recipients

Impact: No ODP impact.

Proposed Activity: Training, Technical Support
Objective: Introduce CFC-free formulations
Target Group: Eligible phase-3 recipients

Impact: Phaseout of 291.8 t CFCs/y at baseline conditions

#### 4.2 REFRIGERATION SERVICING

Proposed Activity: Training of Technicians in Good Refrigerant Management Practices

Objective: To train technicians.

Continuing activity

Target Group: R&AC Technicians

Impact: 1500 – 1800 R&AC technicians trained. No ODP impact.

Proposed Activity: R & R equipment ordered

Objective: Equip service companies with R&R equipment.

To be implemented.

Target Group: R&AC service companies

Impact: Equipment distributed. No ODP impact

#### 4. **Government Action**

The Control Measures listed below are under consideration. Some will definitely be implemented; the others have to be evaluated carefully before a final decision is taken.

Policy/Activity Planned	Schedule of Implementation
Control Measures under consideration are:	
Ban on new installations and equipment using ODS.	• 2005
• Provide import concessions and tax incentives to promote use of	• 2005
substitutes and alternative technologies, as well as for Recovery and	
Recycling equipment.	
• Establish an inventory of importers of ODS.	• 2005
Implementation of an ODS import quota system.	• 2005
• Certification of technicians/practitioners and/or establishing	• 2005
conditions for recognition of Associations, which can provide	
certification and enforce conditions.	

## 5. Budget for 2004 to be implemented in 2005

Activity	Planned Expenditures (US \$)
Foam Manufacturing Sector	
Equipment	1,470,000
Management Activities	30,000
FUNDING REQUIRED – FOAM MANUFACTURING SECTOR	1,500,000
Refrigeration Servicing Sector	
Training in Good Refrigerant Management Practices-Training of	
Technicians	
National Consultant	\$22,500
Travel, DSA & Communications for Cons.	\$10,500
Train the Technicians	
Awareness	\$20,000
Material	\$7,200
Organisation	\$72,000
Remuneration to Trainers	\$72,000
Total for Training of Technicians	\$204,200
Recovery & Recycling	
R&R Equipment	\$236,313
MAC Equipment	\$56,628
National Consultant	\$22,500
Travel, DSA & Communications for Cons.	\$10,500
Total for R&R & Equipment	\$325,941
Implementation & Management	
Steering Committee	\$5,000
IMU Staffing	\$35,000
Communication	\$2,000
Travel & DSA	\$5,000
<b>Total for Implementation Management</b>	\$47,000
FUNDING REQUIRED – REFIGERATION SERVICING SECTOR	\$577,141
TOTAL FUNDING REQUIRED IN 2004 FOR 2005 ACTIVITIES	\$2,077,141

## 6. Administrative Fees for 2004 program to be implemented in 2005

Agency	Amount
UNDP – Foam Manufacturing Sector	\$133,800
UNDP – Refrigeration Servicing Sector	\$50,063
TOTAL	\$183,863