



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



Distr.  
LIMITADA

UNEP/OzL.Pro/ExCom/41/77  
20 de noviembre de 2003

ESPAÑOL  
ORIGINAL: INGLÉS

COMITÉ EJECUTIVO DEL FONDO MULTILATERAL  
PARA LA APLICACIÓN DEL  
PROTOCOLO DE MONTREAL  
Cuadragésima Primera Reunión  
Montreal, 17 - 19 de diciembre de 2003

**PROGRAMA DE PAÍS: SIERRA LEONA**

Este documento consta de:

- Hoja de Evaluación de Programas de País (preparada por la Secretaría del Fondo Multilateral)
- Comentarios y Recomendaciones de la Secretaría del Fondo Multilateral
- Carta de Envío del Gobierno de Sierra Leona
- Carátula del Programa de País
- Programa de País (Resumen Ejecutivo)

## HOJA DE EVALUACIÓN DE PROGRAMAS DE PAÍS DE SIERRA LEONA

Unidad de Ozono, Ministerio de Tierras, Planificación y Medio Ambiente.

### *Estado de la ratificación del Convenio de Viena y el Protocolo de Montreal*

	<b>Firma</b>	<b>Ratificación</b>	<b>Entrada en vigor</b>
Convenio de Viena (1985)		29-ago-01	27-nov-01
Protocolo de Montreal (1987)		29-ago-01	27-nov-01
Enmienda de Londres (1990)		29-ago-01	27-nov-01
Enmienda de Copenhague		29-ago-01	27-nov-01
Enmienda de Montreal (1997)		29-ago-01	27-nov-01
Enmienda de Beijing (1999)		29-ago-01	27-nov-01

**Producción de sustancias controladas:** No se producen sustancias controladas

**Consumo de sustancias controladas (2002)** 73,6 toneladas métricas  
75,0 toneladas ponderadas (PAO)

(toneladas)	CFC-11	CFC-12	CFC-113	CFC-114	CFC-115	TOTAL	Halón121	Halón 130	TOTAL	CTC	MCF	TOTAL	MB
SAO		71,0			1,7	72,7				0,9		0,9	3,3
PAO		71,0			1,0	72,0				1,0		1,0	2,0

**Distribución de PAO por sustancia** CFC 96,0% Halón CTC y MCF 1,3% MB 2.6%

**Distribución de PAO por sector:** Aerosoles Espumas Halones Refrigerantes Solventes Otros MB  
Consumo (toneladas PAO): 0,0 0,0 0,0 72,0 1,0 0,0 2,0

Porcentaje del total: 96,0% 1,3% 2,7%

**PROTOCOLO DE MONTREAL** (toneladas PAO) CFC Halones Metilbromuro  
Consumo básico 72,0 2,0  
Nivel admisible de consumo en 2005 36,0 1,6  
Fuente: Programa de País (2003)

### **Programa de País**

**Duración del programa de país:** 5 años (2004-2008)

**Meta de reducción total de SAO:** 85% de reducción del consumo de SAO para fines de 2006.  
Eliminación total para 2010

**Área prioritaria de reducción gradual:** Sector de servicios de refrigeración

**Costo de las actividades en el programa de país** 600 000 \$EUA

### **Estrategia:**

*El objetivo de la estrategia del Gobierno es minimizar el consumo de SAO y el costo para la industria y los consumidores con base en marco legal y las políticas económicas e industriales del país; continuar satisfaciendo la demanda de productos con base en el tiempo de residencia de las SAO sin comprometer los objetivos del Protocolo de Montreal; y la introducción de regulaciones factibles para las SAO.*

## COMENTARIOS Y RECOMENDACIONES DE LA SECRETARÍA DEL FONDO MULTILATERAL

### DESCRIPCIÓN

1. Según una encuesta sobre el consumo de SAO realizada durante la preparación del programa/ Plan de gestión de refrigerantes de Sierra Leona, en 2002, en el país se utilizaron unas 71,7 toneladas PAO de CFC (principalmente CFC-12) para mantener refrigeradores domésticos (39,0 toneladas PAO), refrigeradores comerciales e industriales (11,7 toneladas PAO), y unidades de climatización de automóviles (21,0 toneladas PAO). Adicionalmente 0,2 toneladas PAO de CTC son utilizadas como solventes y 1,2 toneladas como fumigante para la tierra.
2. El uso de CFC en los sectores de aerosol y espuma fue eliminado completamente a principios de los años 1980 y 1990. Tres compañías manufactureras de espuma flexible convirtieron sus operaciones a cloruro de metileno. Estas compañías utilizaron un total de 10 toneladas PAO de CFC-11.
3. Todas las SAO fueron importadas principalmente de los Emiratos Árabes Unidos; sin embargo, en años recientes, las importaciones de Nigeria y Guinea (legales e ilegales) se han tornado importantes debido a significativas diferencias de precios del CFC importado en volumen de estos países. En la actualidad, las importaciones de SAO no están reguladas.
4. El Gobierno de Sierra Leona está proponiendo el establecimiento de legislación y de un sistema de regulación para controlar la importación de SAO y equipos que utilizan SAO. Se aplicará un impuesto especial a todas las SAO importadas al país para fomentar la sustitución de SAO en aplicaciones en las que éstas puedan ser fácilmente substituidas.
5. El sistema de licencias que será establecido por el Ministerio de Tierras, Planificación y Medio Ambiente requerirá que todos los importadores obtengan una licencia/permiso para importar SAO al país. El sistema facilitará la transición hacia tecnologías no basadas en SAO, informando a los importadores, mayoristas e industrias acerca de las cuotas SAO que se pueden importar cada año al país.
6. El Departamento del Medio Ambiente del Ministerio de Tierras, Planificación y Medio Ambiente, la Aduana y el Ministerio de Justicia tendrán la responsabilidad de hacer cumplir el sistema de licencias para importación/exportación. Se aplicarán sanciones para disuadir la importación ilegal de SAO o de equipo basado en SAO.
7. El Programa de País incluye un proyecto para el establecimiento de una Unidad del Ozono en el Ministerio de Tierras, Planificación y el Medio Ambiente. El Gobierno de Sierra Leona está solicitando un total de 86 000 \$EUA para la ejecución de este proyecto. Los comentarios y recomendaciones de la Secretaría del Fondo acerca de esta solicitud se presentan en el documento UNEP/OzL.Pro/ExCom/41/18.
8. El Programa de País también incluye una propuesta del Plan de gestión de refrigerantes. El Gobierno de Sierra Leona está solicitando un total de 658 513 \$EUA para la ejecución de este

proyecto. Los comentarios y recomendaciones de la Secretaría del Fondo acerca de esta solicitud se presentan en el documento UNEP/OzL.Pro/ExCom/41/56.

9. El Programa de País también incluye un programa de asistencia técnica para enfocar salud ocupacional y seguridad de los trabajadores que utilizan cloruro de metileno en el sector de manufactura de espuma flexible (78 000 \$EUA).

## COMENTARIOS DE LA SECRETARÍA

10. La Secretaría señaló que la Sección A del documento emitido por la Secretaría del Ozono acerca del Status de la ejecución de las recomendaciones del Comité de Ejecución sobre temas de incumplimiento, destacando situaciones posibles de incumplimiento emergentes del informe de datos del Artículo 7 del Protocolo de Montreal (UNEP/OzL.Pro/ImpCom/31/2), en el que se informa que Sierra Leona aún no ha cumplido con las Decisiones XIV/14 y XIV/16 de las Partes (incumplimiento con la presentación de informes de datos del Artículo 7).

11. La Secretaría también hizo hincapié en la Decisión 38/12 del Comité Ejecutivo, urgiendo a las agencias ejecutoras responsables de un proyecto de fortalecimiento institucional en un país sin una base de referencia de cumplimiento para asegurarse que, antes de la preparación y presentación de proyectos (que no sean de fortalecimiento institucional) al Comité Ejecutivo, al país se le proporcionó toda la asistencia para que informe acerca de la base de referencia de cumplimiento y describir su situación a la Secretaría del Ozono.

12. Con base en las decisiones antes mencionadas, la Secretaría sugirió que el PNUMA aconseje al Gobierno de Sierra Leona:

- a) Envíe una comunicación oficial a la Secretaría del Ozono reportando su consumo de SAO de conformidad con los recolectados durante la preparación del programa de país;
- b) Busque asesoramiento de la Secretaría del Ozono acerca de si su último informe de consumo en el Programa de País puede ser considerado como base de referencia basándose en la explicación proporcionada en el Programa de País (v.g., conflictos internos que se presentaron en el país durante el período 1990-1999 y que llevaron a la destrucción de sistemas de refrigeración domésticos y comerciales, y la reciente importación de unidades de refrigeración que llevaron a un incremento en el tiempo de residencia de las SAO. Asimismo, no están disponibles registros de consumo de SAO con anterioridad al 2000); y
- c) Presente al Comité de Ejecución un plan de acción, en conformidad con lo propuesto por el Gobierno en el programa de país, para garantizar el cumplimiento de las disposiciones del Protocolo de Montreal.

13. Posteriormente, PNUMA informó a la Secretaría del Fondo que el Gobierno de Sierra Leona ha presentado sus datos de consumo de SAO para el período 1986 - 2002 a la Secretaría del Ozono.

### Asistencia Técnica en el sector de espuma

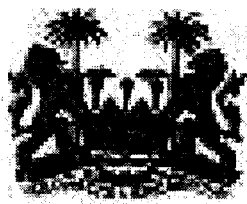
14. La Secretaría señaló que la solicitud para un programa de asistencia técnica para abordar el tema de salud ocupacional y la seguridad de los trabajadores que usan cloruro de metileno en el sector de manufactura de espuma flexible no era un tema incremental, y por lo tanto no era elegible.

### **RECOMENDACIONES DE LA SECRETARÍA**

15. La Secretaría del Fondo recomienda la aprobación del Programa de País de Sierra Leona, y hace notar que la aprobación del Programa de País no denota aprobación de los proyectos identificados en el mismo, ni de sus niveles de financiamiento. La aprobación del Programa de País para Sierra Leona se hace sin perjuicio a cualquier decisión que las Partes pudieran adoptar tras considerar el Comité de Ejecución los datos sobre el consumo presentados conforme al Artículo 7 por el Gobierno de Sierra Leona.

16. La Secretaría del Fondo también recomienda que se solicite al Gobierno de Sierra Leona presentar anualmente información al Comité Ejecutivo sobre el progreso realizado en la ejecución del Programa de País, de conformidad con la decisión del Comité Ejecutivo sobre la ejecución de Programas de País (UNEP/OzL.Pro/ExCom/10/40, párrafo 135). Utilizando el formato aprobado, el primer informe, que cubriría el periodo del 1° de enero 2004 al 31 de diciembre de 2004, debería presentarse a la Secretaría del Fondo Multilateral a más tardar el 1° de mayo de 2005.





SIERRA LEONE GOVERNMENT  
MINISTRY OF LANDS, COUNTRY PLANNING AND THE ENVIRONMENT  
Tel: 232-22-235913/240397/240355 Mobile: 232-22-766666887  
Fax: 232-22-235913 E-mail: jalamara@yahoo.com jussseyrl@yahoo.com

Chief Officer  
Multilateral Fund for the Implementation of the Montreal Protocol  
Fax : (514) 282 - 0088

6<sup>th</sup> October, 2009

Dear Chief Officer,

**ENDORSEMENT LETTER FOR THE COUNTRY PROGRAM AND REFRIGERANTS  
MANAGEMENT PLAN FOR THE PHASE OUT OF THE OZONE DEPLETING  
SUBSTANCES IN SIERRA LEONE**

I have the honour to herewith submit the Country Program and Refrigerants Management Plan for the Phase Out of the Ozone Depleting Substances in Sierra Leone to you as well as to the Secretariat of Multilateral Fund for the Implementation of the Montreal Protocol to be considered for Multilateral Fund available financial support for its implementation. In this regard, I would like to inform you that the enclosed Country Programme and Refrigerants Management Plan for the Phasing Out of the Ozone Depleting Substances in Sierra Leone is fully endorsed by my government.

We are pleased to assert that the Government of the Republic of Sierra Leone is highly committed to the implementation of its plan for the phase out of ozone depleting substances as stipulated in the Plan.

We hope that the Country Programme and Refrigerants Management Plan will get approval in the 41<sup>st</sup> Meeting of Executive Committee of the Multilateral Fund in December 2009.

Sincerely yours,

  
Alfred Bobbong Sesay (Dr)  
Minister

CC:

Marco Gonzalez  
Executive Secretary  
Ozone Secretariat  
Fax : (254 20) 82 39 13, 823601

Rajendra M. Shende  
Chief Energy and Ozone Action Unit  
United Nations Environment Programme,  
Division of Technology, Industry and Economic  
Fax : (+33) 44 37 14 74





## COUNTRY PROGRAMME COVER SHEET

**COUNTRY:** SIERRA LEONE

**LEAD NATIONAL AGENCY:** DEPARTMENT OF ENVIRONMENT (UNDER  
MINISTRY OF LANDS, COUNTRY PLANNING  
AND ENVIRONMENT

**LEAD IMPLEMENTING AGENCY:** UNEP

**DATE RECEIVED:** OCTOBER 2003

**PERIOD COVERED BY COUNTRY:  
PROGRAMME** 2004-2008

### 1. PHASE OUT SCHEDULE

SUBSTANCE	CURRENT CONSUMPTION (TONS X ODP) 2002	PLANNED TOTAL CONSUMPTION UNTIL PHASE-OUT (TONS X ODP) 2002-2010	PLANNED YEAR OF COMPLETE PHASE-OUT
CFC-12	71	150	2010
CFC-115	<1	<1	2010
CTC	<1	<1	2010
METHYL BROMIDE	<2	<3	2015
<b>TOTAL</b>	<b>75</b>	<b>155</b>	

### 2. GOVERNMENT ACTION PLAN

YEAR	DESCRIPTION OF ACTION	SECTOR	INTENDED EFFECT	ESTIMATED COST (US\$)
2003	Establishment of Ozone Office (Unit)	All	Provide monitoring and co-ordination	86,000
2003	Establishment of National Committee on ODS	All	Provide monitoring and co-ordination	
2003-2005	Public Awareness Campaign	All	Create Awareness	
2003-2005	Strengthening institutional framework	All	Provide monitoring and co-ordination	
2004-2006	Establishment of monitoring system for ODS imports, uses and Introduction of import licensing system	All	Ensure compliance with Protocol	
2004-2006	Enactment of regulations and provision of incentives and penalties	All	To ensure compliance with Action Plan	
2004-2006	Certification of refrigeration engineers and technicians	Refrigeration	To ensure improved servicing	
2004-	Establishment of National	Refrigeration	To supervise activities	524,260

2006	Committee on Improved Refrigeration Practices (NCIRP)		of refrigeration sector	
2004-2006	Improvement in servicing and maintenance of refrigeration equipment	Refrigeration	To reduce consumption of CFCs during servicing	
2004-2006	Training of refrigeration engineers and technicians	Refrigeration	Ensure improved servicing and maintenance practices	
2004	Improvement in the supply of nitrogen for servicing of refrigeration equipment	Refrigeration	To guarantee availability of nitrogen to reduce consumption of CFCs	
2004-2006	Introduction of Inspection scheme for imported refrigerators	Refrigeration	To reduce consumption of CFCs	
2004-20067	Introduction of retrofitting of industrial refrigeration systems	Refrigeration	To ensure adoption of proper retrofitting techniques	
2004-2006	Establishment of National Refrigeration Demonstration Centre Implementation of Train the Trainer Programme; Improved Servicing and Maintenance Practices in Refrigeration Sector;	Refrigeration	Trained technicians; To ensure reduction in ODS consumption.	
2004-2008	Incentive Programme for Commercial and Industrial refrigeration End-User Sector, Mobile Air-Conditioning (MAC) Project; Customs Training Programme; Monitoring of all activities within the RMP.	Refrigeration	To ensure reduction in ODSs consumption.	

## **EXECUTIVE SUMMARY**

### Background

The Montreal Protocol is an international agreement that aims at reducing and eventually phasing-out the production and use of Chlorofluorocarbons and Halons. The Protocol came into force in January 1989 and has since been ratified by 184 countries as of June 2003.

The Protocol, since its inception, has gone through four amendments that aim at accelerating the phase-out of these Ozone Depleting Substances (ODS). The amendments include the London Amendment of 1990, Copenhagen Amendment of 1992, Montreal Amendment of 1997 and Beijing Amendment of 2000.

The London Amendment was decided by the Second Meeting of the Parties in 1990 where controls on Annex B substances were added. At this meeting, the phase out schedules of Annex A substances were also accelerated. The amendment requires a complete phase-out of CFCs and halons by 2000, but developing countries with a calculated per capita consumption of Annex A substances below 0.3 kg (Article 5 countries) were allowed 10 years grace period to phase-out their use of ODS. It was also noted under the amendment that the use of ODSs in export products have to be phased-out by 2000, as the ten years grace period provision only applies to ODS used to meet domestic needs.

The London Amendment also provides (in Article 10) for a financial mechanism (Multilateral Ozone Fund) to assist Article 5 Paragraph 1 countries to comply with the control measures of the Protocol. An initial sum of US\$ 240 million dollars was allocated to the fund by non-Article 5 countries (industrialized countries) for the period 1991-1993. Additional contributions totaling US\$ 445 million were also committed for the period 1994-6, US\$ 466 million for 1997-9 and US\$ 440 million for 2000-2002.

Sierra Leone became a party to the Vienna Convention, Montreal Protocol, the London, Montreal, Copenhagen and Beijing Amendments on August 29, 2001. The consumption of ODS for 2002 is 82 ODP tons. This implies a per capita consumption of ODS of 0.01 kg. This means that Sierra Leone falls under the category of Article 5 Paragraph 1 countries, and thus qualifies for a ten year delay in the phase out of ODS. It is also eligible to receive technical and financial assistance from the Multilateral Fund. Sierra Leone is currently temporarily categorized as an Article 5 Paragraph 1 country, pending receipt of the country's complete split data.

### Use of ODSs in Sierra Leone

There is no production of ODSs in Sierra Leone. These substances are all imported by a limited number of local distributors and directly by the ODS-using companies. The total import of CFCs has been estimated at approximately 71 metric tons (MT) in 2002 of which CFC-12 account for almost 99%. Approximately 1 metric ton of CFC-115 is used in the composite refrigerant CFC-502 consisting of 49% HCFC-22 and 51% CFC-115. Consumption of other ODSs including methyl bromide and carbon tetrachloride (CTC) is estimated at 2.2 metric tons. In terms of ODP weighted ODS consumption, the total has been estimated at 72 metric tons (Tables 2.1, 2.2 & 2.3).

The dominant part (85%) of consumption of controlled ODS is used for servicing of existing refrigeration equipment and to a minor extent also for installation of new equipment. No manufacturing of domestic refrigerators and the like takes place in Sierra Leone. Manufacturing of flexible foam for mattresses, cushions etc. accounts for 12% of the 2002 regulated consumption, while the remainder includes methyl bromide and carbon tetrachloride, which are used for various purposes.

In the early 1990's, Sierra Leone experienced a decline in the use of CFCs as blowing agents in the manufacturing of flexible foam, when three of the largest manufacturer switched to methylene chloride due to awareness of the ozone issue. The use of CFCs as propellants for aerosols stopped around 1980.

### Methodology of the Country Programme Preparation

The methodology for the preparation of the Country Programme involved two missions to Sierra Leone in April and June, 2003 with the purpose of collecting demand figures and other relevant data, discussing institutional and policy framework with industry leaders and government officials, and identifying project activities which may qualify for support from the Multilateral Fund. Costs estimates were then made for the different actions and projects based on consultations with specialists both in Sierra Leone and abroad in the fields of refrigeration and flexible foam.

### Critical Assumptions

In order to estimate the total incremental costs of ODS phase-out in Sierra Leone, the most plausible substitution techniques were identified and costed based on up to date information contained in the UNEP Technical Options and the Refrigeration, Air Conditioning and Heat Pumps, Technical Options Committee Reports.

The incremental costs estimated for Sierra Leone comprise three elements:

- user costs, i.e. costs incurred at the level of manufacturers of ODS using products including incremental capital and operations costs, costs of re-training of personnel and research and development in connection with adaptation to ODS free technology, and the costs of technical assistance and support;
- consumer costs, i.e. incremental costs arising from forced early replacement of domestic refrigerators and extra costs of purchasing CFC free refrigerators instead of cheap second-hand CFC-12 refrigerators;
- government costs for institutional strengthening to ensure effective implementation of the Protocol.

The analyses in this report are based on a number of assumptions of which the most crucial are listed below:

- ODSs continue to be available in sufficient quantities to meet demand up to the year 2010 at current prices,
- unconstrained demand grows at a typical rate of 5-15% per year.

### Phase-out Scenario

Since Sierra Leone has only six years to phase out her ODSs, only one phase-out scenario (allowable phase-out scenario) is selected and analysed for Sierra Leone . This allowable phase-out scenario is characterised by the full utilisation of the 10-year delay provision in the Protocol. It postpones ODSs phase-out until the latest possible date while keeping the country within the limits of the Montreal Protocol.

The various measures outlined in the Country Programme like better servicing and maintenance procedures can be achieved without increasing the cost of the phase-out significantly. These issues show that under the current situation, the allowable phase-out scenario is the most likely and desirable for Sierra Leone.

### Recommended Phase-out Strategy

This strategy adopted for Sierra Leone proposes a freeze in the consumption of ODSs at 1995, 1996 and 1997 average consumption levels by 1999, 50% reduction by 2005, 85% reduction by 2007 and 100% reduction by 2010. In view of the unavailability of ODSs consumption data for the period 1995 to 1997 due to a decade of war and related economic disruption, consumption figures for 2002 are used as the base year from which compliance calculation would have to be calculated.

This strategy will ensure compliance with the provisions of the Protocol and further reflect on Government's objectives to minimise Sierra Leone's consumption of ODSs while at the same time reducing the cost associated with the country's industries and consumers. This is also in accordance with projects proposed for financing from the Multilateral Fund and in agreement with the aim of the Fund to provide incentives for the eventual phase-out of ODSs by 2010.

### Action Plan

The objective of the Action Plan is to phase-out the consumption of ODSs in Sierra Leone in compliance with the Montreal Protocol as ratified by the Sierra Leonean Government, and in accordance with the recommended ODS phase-out strategy.

The Action Plan covers an initial period of five years from 2004 to the end of 2008. The plan comprises the introduction of Government initiatives to effectively regulate and monitor the use of ODSs, and a series of proposed projects in the ODS end user sectors some of which are seen as prerequisites for implementation of the phase-out schedule.

### **Government Actions:**

Two of the basic actions included in the plan have already been initiated with effect from the beginning of 2003.

The relevant institutional framework for implementation of the Action Plan has been created by the establishment of the National Committee for ODS (NACODS), which includes representatives from key Government institutions as well as representatives for different user associations. The Committee shall advise the Department of Environment (DoE) on all issues related to ODSs. Furthermore, under the DoE, a special Ozone Office has been created. This Office acts as secretariat for the Committee and is envisaged to undertake a coordinating as well as a monitoring function in all further activities concerning the phasing-out of ODSs. Three Task Groups of the Committee on Programme Implementation, Refrigeration and Foam Sectors will assist in the work of the office through periodic reviews of progress of actions.

A system for monitoring ODS use by substance has also been established. The system is based on the need for a clearance certificate to be obtained from the Ozone Office for import of ODSs before such import can be effected, and that the Customs and Excise Department will supply copies of all import declarations concerning ODSs to the Ozone Office on the basis of the clearance certificate permitting the import. This will enable the Office to be in control of all imports passing through the ports and points of entry.

Other proposed Government Actions include:

### Introduction of Regulatory Measures

The proposed regulatory measures include a schedule of bans on the use of ODSs for specific purposes at specifically given dates in accordance with the recommended phase-out strategy; a special ODS tax on

imports of all controlled substances to encourage initial substitution of ODSs in easily substitutable applications such as flexible foams; and tax exemptions for imports of ODS conserving or benign technology and non-ODS containing products. A local legal consultant will assist in preparing a full schedule of regulatory measures and draft regulations for consideration of the Government through the National Committee on ODS. An economic consultant will also assess the impact of these regulations and cost implications.

### Import/Export Licensing System

An import/Export Licensing System is expected to be established to allow the monitoring and controlling of ODS in and out of the country. The system will facilitate the smooth transition to non-ODS technology by providing clear signal to importers, wholesalers and industry about the maximum quantities of ODS permitted to be imported each year into the country until the phase-out date. The key elements of the import/export licensing system in Sierra Leone include the following:

- Legal basis, structure and functioning of the Licensing system;
- Import restrictions for ODS (quota, bans);
- Seized ODSs and ODSs based equipment;
- Recording of Data, data management and reporting;
- Monitoring and evaluation;
- Introduction of certification arrangements for refrigeration engineers & technicians and
- Information dissemination.

### **Project Proposals:**

Seven (7) projects under two main sectors are proposed for funding from the Multilateral Fund. The sectors are Institutional Strengthening, Refrigeration and Foam sectors

The projects comprise of the following:

**A) Project ISN 1:** Institutional strengthening for the phase-out of ozone depletion substances

**B) Project-R1-** Refrigeration Sector Projects

Six (6) sub-projects that aim at eliminating the use of ODS within the refrigeration sector are proposed.

These sub-projects include:

- 1) Training of Trainers in Code of Good Refrigeration Practices & Establishment of National Refrigeration Demonstration Centre-Project R-1 (Detailed description included in RMP)
- 2) Improved Servicing and Maintenance within the refrigeration Sector-Recovery and Recycling Project-Project R-2 (Detailed description included in RMP)
- 3) Incentive Programme for Commercial and Industrial refrigeration End-User Sector, (Detailed description included in RMP)
- 4) Mobile Air-Conditioning (MAC) Project; (Detailed description included in RMP)
- 5) Customs Training Programme; (Detailed description included in RMP)
- 6) Monitoring of all activities within the RMP. (Detailed description included in RMP)

Table 4.4 shows the proposed phasing and duration of the proposed projects. The projects will be initiated as soon as the Government secures funds for their implementation from the Multilateral Fund.

The total incremental costs of the proposed Government Action Plan are estimated at US \$ 524,260 at 2003 prices.

It is proposed that the Multilateral Fund cater for all incremental costs not covered by other funding sources. Once the incremental costs of the proposed projects are approved by the Multilateral Fund, appropriate fund-handling mechanisms will be set up.

#### Project ISN: Institutional Strengthening for Programme Implementation

The purpose of the project is to strengthen the capability of the Department of Environment to co-ordinate the implementation of Sierra Leone's Country Programme to phase-out the use of ODSs.

#### Project R-1: Improved Servicing and Maintenance within the Refrigeration Sector

The purpose of the project is to create a lasting improvement of the maintenance and servicing procedures currently being employed within the refrigeration sector in Sierra Leone by training and supervisory programmes for technicians, introduction of recycling and strengthening of training institutions etc. The project will cover procedures related to all kinds of refrigeration equipment in use.

### **Budget and Financing of Activities 2004-2006**

Tables 4.1-4.4 give a breakdown of costs of the Action Plan by components and by year of implementation. It is proposed that all the costs are incremental project costs to be funded by the Multilateral Fund. The costs of the Government Action Plan proposed are covered by the Fund as an institutional support project. Once the incremental costs of the proposed projects are approved by the Multilateral Fund, appropriate funds handling mechanisms will be set up.

Total incremental costs of the Country Programme for the period 2004-2008 is estimated at US\$ 524,260.