GOVERNMENT OF KIRIBATI

NATIONAL COMPLIANCE ACTION PLAN FOR KIRIBATI FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL ON SUBSTANCES THAT DEPLETE THE OZONE LAYER

2002-2005

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1.0 Introduction

Kiribati comprises three groups of islands straddling the equator – the Gilberts, the Phoenix and the Line Islands. These islands, although covering only some 880 square kilometres of land area, are spread over 3.5 million square kilometres of territorial waters. Most of the islands are only three to four meters above mean sea level and there are few places where the islands are wider than 1km although some are relatively long. Tarawa is the capital, located in the Gilbert Group. In South Tarawa, monthly temperature maxima vary between 33 degrees Celsius and 35 degrees Celsius. The mean temperature is about 28.3 degrees Celsius (as advised by the Meteorological Office)

The most recent census was in 2000 with a preliminary result of a population of 84,494 and an estimated annual growth rate of 1.69%. Of this total, 36,717, or just under half, live one island: South Tarawa.

The majority of the population, lead a largely subsistence lifestyle and the standard of living is low. The 1995 GDP (the most recently published figure) was AUS$ 62.3 million (Approximately US$32 million). Most development is concentrated on the main island of South Tarawa, although tourist developments also exist on other islands and there is a large resort planned for Kiritimati (Christmas) Islands which will be built by the Japanese. Most inhabitants do not have electricity in their houses.

There are no significant manufacturing industries in Kiribati and most goods are imported from Australia, Fiji or Japan. Almost all imports pass through Australia or Fiji before being sent to Kiribati. Therefore the country of origin of imported goods is often reported as being from Fiji or Australia, even when it has come from elsewhere. There is also trade with the Micronesian Countries such as the Republic of the Marshall Islands and Federated States of Micronesia (FSM).

Because Kiribati is a small group of islands, with fairly constant trade winds, corrosion from salt air is a serious problem. Accordingly steel products, such as cars, but also refrigerators and air-conditioners, suffer from severe corrosion problems. The average life of a car in Kiribati is around five years after arrival in the country because of the corrosion. As a result of the influx of cheap, but relatively old second hand vehicles, the disposal of car bodies is becoming a major environmental problem.

Fish is the principal food of the Kiribati people, who are known to be among the people with the highest per capita consumption rate in the world. It is not surprising that fisheries related activities are predominant in Kiribati. Household-source of income as a unit indicates that dependency of households on income from fishing activities ranks third after employment, and copra (National Planning Office, 1997). An increase in the use of coolers, and home refrigerators for catch is noticeable. On a larger scale, Government's owned fishing company, Central Pacific Producers (formerly Te Mautari Ltd.), operates a 2x50 tonnes cold storage facility. Refrigeration is therefore an essential part of the food production system for the urban population in South Tarawa.

Fire fighting service is a responsibility of the Police department who provide a standby service at Bonriki airport during landings and takeoffs of aircraft. Important Government buildings and other buildings that are prone to fire are provided with fire fighting equipment.

Kiritimati Island
Although Kiritimati Island is part of Kiribati it is more than 2000km from the capital in Tarawa and there are no direct flights between Tarawa and Kiritimati. In preparing this NCAP it has not been possible to collect any statistics on use of ODS on Kiritimati Island.

The lack of information on Kiritimati Island is of concern because, in addition to tourist developments, a multinational project called "HOPE-X" involving satellite landings and trans-shipments, with a complex telecommunication and scientific establishment is being established on Kiritimati Island.

It is possible that there would be consumption of CFCs for servicing vehicles and almost certainly of HCFCs for servicing refrigeration and air-conditioning equipment. Although the international project would not be eligible for assistance with phase-out, its ODS use will still count for Kiribati's consumption. In addition to the HOPE-X project, there may also be consumption by local companies, such as hotels and shops, which may potentially be eligible for assistance. Their level of ODS consumption is unknown at this time.

Before Kiribati's consumption statistics for 1999 onwards are transmitted to the Ozone Secretariat, the Government wishes to establish the consumption on Kiritimati Island. Initially, this will be done from Tarawa, but ideally, the NCAP should allow the DOE to send a representative to Kiritimati island to collect the relevant data.

1.1 Purpose

Kiribati realises the importance of participating in international efforts to protect the global atmosphere from induced human interference. Measures are required to control the production and consumption of substances categorised under the Montreal Protocol and amendments. As Kiribati is not a producer of ODS, it is the control of the consumption that is relevant in the case of Kiribati. As part of its obligations under the Vienna Convention and the Montreal Protocol, Kiribati has prepared this National Compliance Action Plan (NCAP).

In developing its NCAP Kiribati has received advice from the Regional Programme on Ozone Depleting Substances based at the South Pacific Regional Environment Programme (SPREP)

In the process to writing and finalising this NCAP, technical comments from the international consultant, Mr. Iain McGlinchy, and comments and views at three meetings, one in a form of a workshop, of individuals from businesses and concerned Government Ministries was beneficial.

In this NCAP, it is assumed that Kiribati shall be a party to subsequent amendments to the Protocol. In addition to being bound by the phase out schedules, it shall undertake any other obligations that may be adopted for developing country parties by the Meeting of the Parties of these instruments.

1.2 Status

Kiribati has acceded to the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer which came into effect on 7 January 1993. Kiribati is now in the process of acceding to the London Adjustments and Amendments and all other subsequent Amendments to the Montreal Protocol. The process of ratification is expected to be completed shortly.

Because it is a Party to the 1987 Montreal Protocol and none of its amendments, Kiribati is only required to control the consumption of chlorofluorocarbons (CFCs) and halons at this time.

Kiribati is in full compliance with its obligations to meet the freeze in consumption from 1 July 1999.

Kiribati is classified as operating under Article Five of the Montreal Protocol and is therefore eligible for assistance from the Multilateral Fund under the Montreal Protocol. As an Article 5 country, Kiribati is eligible for the ten year grace period to delay its commitments to phase out its consumption of the controlled substances. It also implies a special consideration within the framework of the Convention and Protocol for technical, technological, and financial support towards its action plan to implement the Montreal Protocol.

The base years for calculating the phasing out of the various groups of the controlled substances are 1995-1997. According to data submitted to the Ozone Secretariat, the average consumption (equal to imports) of CFCs during 1995 – 1997 was 0.7 ODP tonnes. Data collected during preparation of this NCAP suggests that actual consumption of CFCs in 1995-97 may have been lower than was reported to the Ozone Secretariat This is discussed further in section 2.1.2.

Table 1.1 Maximum allowable consumption under Montreal Protocol based on data submitted to the Ozone Secretariat

Year	Montreal Protocol percentage reduction	Maximum consumption (ODP tonnes)
Base Year	0%	0.7
2000	0%	0.7
2001	0%	0.7
2002	0%	0.7
2003	0%	0.7
2004	0%	0.7
2005	50%	0.35
2006	50%	0.35

2007	85%	0.105
2008	85%	0.105
2009	85%	0.105
2010	100%	0

In 1993 when the Protocol became effective for Kiribati, the estimated population was 75,528; the per capita consumption was estimated to be 0.8 ODP tonnes. Therefore the Per capita consumption was 0.011 kg.

NB. As noted in the introduction, these amounts do not include and ODS consumed on Kiritimati Island

1.3 Assistance received

An MOU between the Ministry of Environment and Social Development on one hand and UNEP on the other hand, signed in 1999, provides for activities that are to be undertaken by Kiribati in implementing the Protocol and Amendments. So far the funds under this MOU have been used only to develop this NCAP.

Additional assistance included:

- Training for four refrigeration technicians in Auckland, New Zealand at the beginning of 2000 funded by NZ Official Development Assistance (ODA).

- Participation by a representative at a three day workshop in Apia, Samoa in April 2001 on implementation of the Montreal Protocol in the Pacific.

2.0 Current Situation

2.1 Current Consumption and Forecast

2.2.1 Current Consumption

As a least developed country, Kiribati does not produce any of the controlled substances listed in Annexes A, and B of the Montreal Protocol, or in other Annexes in subsequent Amendments. As for the consumption of these substances, industries and businesses import some for use in refrigeration, air conditioning systems for buildings and houses, and mobile air-cooling system in motor vehicles. Other than the past use of a small amount of methyl bromide for fumigation, consumption of ODS in Kiribati is exclusively in the refrigeration and air conditioning sector.

Chlorofluorocarbons (CFCs)
There is no reliable data on CFC consumption before 1995. Estimates of consumption have been supplied to the ozone Secretariat for 1993 and 1994 to comply with data reporting obligations.

The data for CFC consumption presented in table 2.1 is new and was collected as part of the development of the NCAP. It is considered more accurate than the data submitted to the Ozone Secretariat, especially for the years 1998 and 1999. The new data suggests that the base year consumption figure should actually be 0.283 ODP tonnes and not 0.7 as reported to the Ozone Secretariat. However, even with the new revised data, Kiribati, with zero consumption in 2001 is still in full compliance with its phase-out obligations.

Table 2.1 Consumption of CFCs in Kiribati (tonnes)

ODS	ODP	1995	1996	1997	1998	1999	2000	2001
CFC-11	1.0	0.04	0.00	0.00	0.00	0.00	0.00	0
CFC-12	1.0	0.33	0.20	0.19	0.24	0.18	0.03	0
CFC-115	0.6	0.09	0.01	0.03	0.01	0.06	0.01	0
Total (ODP tonnes)		**0.43**	**0.21**	**0.21**	**0.25**	**0.21**	**0.04**	**0**

NB. CFC-502 is a mixture of 51.2% CFC-115 and 48.8% HCFC-22.
It is reported as its components.

NB. As noted in the introduction, this data does not include any CFC that may be consumed on Kiritimati Island.

Hydrochlorofluorocarbons (HCFCs)

Only HCFC 22 is know to be imported into Kiribati. There may be small amounts of other HCFCs being imported as components of mixtures used to service equipment that once used CFCs, but so far this amount is negligible.

Table 2.2 Consumption of HCFC-22 in Kiribati (metric tonnes)

ODS	ODP	1995	1996	1997	1998	1999	2000	2001
HCFC-22	0.055	0.48	0.33	0.29	0.43	0.56	0.54	0.92
Total ODP tonnes		0.03	0.02	0.02	0.02	0.03	0.03	0.05

The use of HCFC-22 is increasing in Kiribati, largely for use as a refrigerant in the fishing industry and for servicing of small air-conditioning equipment.

NB. As noted in the introduction, this data does not include any HCFC that may be consumed on Kiritimati Island.

Other ODS consumption

Halons are used as fire extinguishing gases. There is no known consumption of bulk halons in Kiribati as there are no halon servicing facilities in Kiribati. There are some existing extinguishers in Kiribati, but there are no records of the exact quantities. The Police Service are reported to hold up to 223kg of halon 1211 (BCF) in extinguishers.

There is no reported use or consumption of any other ODS, i.e. methyl chloroform, carbon tetrachloride, “other CFCs” and HBFCs. It is extremely unlikely that anyone would wish to export any of these substances to Kiribati, as there are no facilities likely to use them.

NB. As noted in the introduction, this data does not include any data on substances that may be consumed on Kiritimati Island.

2.1.3 Forecast CFC Consumption

As noted, there are no obvious sources of supply for CFCs into Kiribati, so consumption is likely to remain at zero for the foreseeable future.

If the supply of CFC had not stopped in 2000 because of the actions of Fiji, it is reasonable to assume that the demand for CFCs would have continued to drop from its reported level of 0.21 ODP tonnes in 1999 to zero over a period of less than 10 years as existing equipment was replaced. Under this scenario it is likely that Kiribati would have remained in full compliance up until 2010.

Table 2.1 Forecast ODS consumption in ODP tonnes

Year	Montreal Protocol Maximum consumption (ODP Tonnes) Using data supplied to Ozone Secretariat	Montreal Protocol Maximum Consumption using new base year figure	Forecast consumption if no other intervention (ODP Tonnes)
2000	0.7	0.283	0.21
2001	0.7	0.283	0.189
2002	0.7	0.283	0.168
2003	0.7	0.283	0.147
2004	0.7	0.283	0.126
2005	0.35	0.1415	0.105
2006	0.35	0.1415	0.084
2007	0.105	0.04245	0.063
2008	0.105	0.04245	0.042
2009	0.105	0.04245	0.021
2010	0	0	0

It is clear from table 2.1 that if regulations are not put in place, to restrict imports of CFCs then even one small shipment of CFCs after 2005 to meet the demand to service imported second-hand Japanese cars could potentially put Kiribati into a situation of non-compliance.

2.2 Industry Structure

All current consumption of ODS in Kiribati is in the refrigeration and air-conditioning sector.

2.2.1 Importers of ODS in Kiribati

Kiribati has strong trading relationships with Australia, Fiji, Japan and New Zealand. Almost all imports, including ODS pass through Australia or Fiji before being shipped to Kiribati. There are no major wholesaling companies for refrigerants in Kiribati and all

service companies import their own refrigerants as needed. The Government has identified the following companies as being involved in importing ODS in Kiribati

In the fisheries sector Central Pacific Producers (formerly Te Mautari fisheries) is the only company importing and servicing equipment. In the transport sector two companies – the Government-owned Plant and Vehicle Unit, and Tarawa Motors are involved. For the electrical and refrigeration sector which service domestic and commercial refrigeration and air-conditioning systems there are three businesses- Tiebo Electrical and Refrigeration, Tema-Cool, and Mary-Cool.

2.2.2 Users of Refrigeration and Air-Conditioning equipment

Industrial refrigeration
As noted above, the major industry in Kiribati is fishing and fishing related activities. Central Pacific Producers undertake fishing activities using its own vessels. Onshore facility includes a cold storage facility with 100 tonnes capacity. They also sell fish from their cold store. They assist with the transhipment of catches from foreign fishing vessels, and retain less quality fish among the catches to sell locally at a cheap price. As a result of financial assistance from the Japanese Government all of the equipment used by Central Pacific Producers now uses HCFC-22 or non-ozone depleting refrigerants.

Artisan fishermen, and some subsistent fishermen use ice cubes in cooler boxes to keep their catch fresh.

Fishing industry and activities being most important in Kiribati, any implication on it will have a ripple effect among all industries and throughout the economy. The effect is difficult to quantify at the present time.

Domestic refrigerators
Servicing of domestic refrigerators and display cabinets is carried out mainly by the smaller private firms. The tropical conditions meant corrosion is a major problem and refrigeration units have a short life. The uneven voltage and frequent power cuts also meant compressor failures were fairly common.

The table below gives some ideas of the quantities of the controlled substances that were imported to Kiribati to support the various industries.

Mobile air-conditioners (MACs)
Private cars are still relatively rare in Kiribati, but there are a large number of recently imported second hand Japanese 10-seater minivans used for freight and passenger transport along Tarawa's only road.

Most of these motor vehicles, whether Government owned or privately owned, have air-cooling systems. Mobile air conditioning units are expected to increase in the coming years. The poor road conditions and corrosion make failure of MACs common and they are often uneconomic to repair. Accordingly relatively little CFC is used for servicing.

Building Air-conditioning
There are no CFC-11 chillers in Kiribati. There are no buildings more than three stories high and no major hotel complexes. All air-conditioning is done using HCFC-22 window units or split systems. Most buildings use only ceiling fans and open windows for cooling.

The construction sector is one of the fast developing sectors in Kiribati as traditional housing and building styles are being replaced by modern housing of concrete and timber structures with corrugated iron roofing. Some government and commercial buildings are fitted with air conditioning systems, as these styles of houses are unsuitable for the Kiribati climate. Very few residential houses and other private buildings are fitted with window air conditioning units. There is an expectation that the demand for air conditioning systems for buildings including residential buildings will increase.

Table 2.4 Consumption of Refrigerants in Different Sectors

Fishing	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
CFC-11 (kg)	0	0	0	0	0	0	0
CFC-12 (kg)	0	0	27.2	32.2	83.6	0	0
CFC-502 (kg)	0	0	0	0	81.6	0	0
CFC-115 (kg)	0	0	0	0	0	0	0
HCFC-22 (kg)	0	44	22	134.8	173.2	261	626
HFC-134a (kg)	0	0	0	0	0	0	0

Transport	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
CFC-11 (kg)	0	0	0	0	0	0	0
CFC-12 (kg)	130	100	70	140	40	20	0
CFC-502 (kg)	0	0	0	0	0	0	0
CFC-115 (kg)	0	0	0	0	0	0	0
HCFC-22 (kg)	0	0	0	0	0	0	0
HFC-134a (kg)	60	100	150	200	250	517.6	350

Refrigeration and Air-conditioning	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
CFC-11 (kg)	40	0	0	0	0	0	0
CFC-12 (kg)	204.8	99.8	95.2	72.6	54.4	0	0
CFC-502 (kg)	177.2	27.2	68	13.6	0	0	0
CFC-115 (kg)	0	0	0	0	0	0	0
HCFC-22 (kg)	390.8	272.6	231.6	290.8	327	267.8	290.6
HFC-134a (kg)	0	0	27.2	22.7	104.3	117.9	145.1

The data presented in these tables is based on returns submitted to the Environment and Conservation Division of the Ministry of Environment and Social Development by all known importers and industries.

Data for 2001 is only up until the end of September.

As noted in the introduction, this data does not include any CFC that may be consumed on Kiritimati Island.

On the basis of the above table, it would seem that the transport sector has been the major consumer of refrigerants with electrical and refrigeration next, and lastly the fisheries.

2.2.3 Fumigation

As country that is not Party to the 1992 Copenhagen Amendment Kiribati is not able to import methyl bromide. It is also not required to report on methyl bromide consumption at this time.

Kiribati does not currently use methyl bromide for any purpose. It has carried out fumigation of produce with methyl bromide in the past for quarantine purposes, but the fumigation facility is no longer functioning. The Ministry but Agriculture is storing up to 8 containers each holding about 13 kg of methyl bromide. It is not known in which year this was imported. There are no plans to import or use methyl bromide in the foreseeable future.

2.3 Institutional framework

The Ministry of Environment and Social Development (the MESD) has responsibility, amongst other things, for protecting, enhancing, and restoring the quality of Kiribati environment. It also co-ordinates sectoral efforts towards the implementation of its overall responsibility. The MESD is the agency responsible for implementing the Montreal Protocol and will co-ordinate the NCAP.

This year that Kiribati has appointed a full time ODS officer to be responsible for programmes and activities on the implementation of the Convention and its Protocol and amendments. The ODS officer will formulate and develop appropriate legislation, report to the Montreal Protocol's Ozone Secretariat and Multilateral Fund and participate in public and industry awareness campaigns.

Among the tasks of the ODS officer based in the Ministry of Environment and Social Development is to collect data on the amounts of imports of the controlled substances by local businesses since 1995. This is presented in the NCAP.

A national steering committee is expected in the "strategic and logical approach" to participate in the preparation of a National Compliance Action Plan. As this type of committee has not yet been formally established, a meeting of a group of individuals, including those who are earmarked to be on the committee, was considered adequate instead. The first meeting was held on the 14th of September 2001, to discuss the first draft of a NCAP. Their comments and observations were used to revise the draft. They met again on the 20th and 24th September to review the revised draft. Recommendations in these latter meetings are now incorporated in this final version of an NCAP.

A steering committee has important roles to play which includes provision of guidance on programmes and activities to phase out the controlled substances, and ensuring that the programmes and activities are carried out in a practical manner that suit the needs of Kiribati. Programmes and activities need resources from multilateral funding

mechanisms under the Protocol and Amendment, and are contained in this NCAP. Any regional initiatives incorporating requirements in NCAPs of island countries of the Pacific region will supplement Kiribati NCAP programmes.

2.4 Policy Framework

As a party to the Montreal Protocol Kiribati has accepted the responsibility to phase-out ODS in the country. The MESD is responsible for implementing the Environment Act 1999 which came into force early in the year 2000. One of the objectives of the Act is to facilitate the undertaking by Kiribati of its obligations under any international agreements of which it is a party. Thus this NCAP can be seen as in compliance with the international laws and also with the Environment Act 1999.

Other laws that would be relevant to this NCAP are on customs and those that have implications on services and utilities that are dependent on the controlled substances. The services and utilities relate principally to refrigeration, air conditioning, and fire extinguishing. Legal, and policy aspects, covering the import and use of ODS need to be well understood by officials and the public.

2.5 Government and Industry response

The Government has responded to its obligations under the Montreal Protocol by preparing this NCAP. As noted above, in preparing this NCAP it has carried out several workshops among important groups to ensure that all affected are aware of the issues and support the policies being adopted.

The users of ODS in Kiribati have already ceased using CFCs for most activities. Major users of refrigeration equipment, such as Central Pacific Producers have replaced existing equipment converted it to Non CFC-refrigerants.

3.0 Implementing Phase Out

3.1 Strategic Statement by the Government

In spite of difficult conditions in Kiribati, the Government is fully committed to participate, in the best possible way, in any global action to address the common concern of all nations over a deterioration of the condition of the atmosphere, one of which is ozone depletion.

Ozone depletion has adverse impacts on human health and on the ecosystems and because of this, Kiribati's participation in the global effort to protect the ozone layer by phasing out the production and consumption of ozone depleting substances is a demonstration of its commitments to help protect the human race and the world's ecosystem.

3.2 Action Plan and Projects under the NCAP

Kiribati government makes a commitment to pursue to the best of its capability the objectives of the NCAP.

The objectives of the plan are:-

- To implement the Montreal Protocol and subsequent Amendments
- To co-operate in the international efforts to protect the ozone layer from depletion by human made chemicals,
- To establish a National Ozone Unit to co-ordinate, implement and monitor the phase-out programme.
- To assist local businesses that are dependent on ODS to make adjustments in their management and operations in order to cope with any implications on their businesses of the international strategies to control and phase out certain chemicals
- To raise public awareness among the different sectors of the population
- To use opportunities for technological and technical transfers to relevant businesses, industries and services in Kiribati.

As a country operating under Article 5 of the Montreal Protocol, it anticipates financial, technical, and technological support to enable it to undertake its obligations under the Protocol. Whilst it is not yet a party to the subsequent Amendments, it gives the undertaking to remedy this situation. It is an undertaking that is reflective of recognition of an urgent need to provide support for the implementation of the Protocol. The adoption of this NCAP is an important part of this strengthening of the institution.

The following programme areas and activities and indicative budget have been identified. They are scheduled to pick up on outstanding work and then to move along with the agreed international time frames for the phasing out the ODS.

3.2.2 Projects

All Projects set out in the Action Plan will be implemented as part of the SPREP Regional Strategy. The budget for these projects is presented as part of the overall Regional Strategy.

National Support Project

A National Support Project is necessary to enable the achievement of strategic objectives under the Montreal Protocol. This project will establish the National Ozone Unit (NOU) with one part time "Ozone Officer" under the MESD as this is the agency responsible for implementing the Montreal Protocol in Kiribati.

The Unit will be staffed be staffed for three years (2002 – 2005). The position will be established as the equivalent of 37% of a full time position for the three year term. For the first year, while regulations are being prepared, a greater number of hours may be needed (up to 70% of full time), with less (20% of full time) in the second and third year. Following the introduction of legislation, the key tasks will be to manage the import permit system for HCFCs and continue any ongoing public education campaigns. The

NOU would also oversee the development and implementation of the certification scheme for refrigeration technicians.

Annual reports on ODS consumption will be submitted to the Ozone Secretariat, as required under Article 7 of the Montreal Protocol. In addition, annual reports on progress of implementation of NCAP will be submitted to the Multilateral Fund Secretariat and the Implementing Agency as required under the decision of the 10th meeting of the Executive Committee.

Legislation and Regulations

To ensure ongoing compliance with the Montreal Protocol, the government will establish a system to monitor and control CFC imports. The development of these regulations and drafting the necessary legislation will be a high priority and should be in place as quickly as possible. New regulations and policies will be prepared under the Environment Act. Assistance will be sought from the SPREP Regional Project to help develop the appropriate regulations.

Because the supply of CFCs from Fiji has already ceased, the Government will prohibit imports of CFCs from the date the regulations come into effect. This will ensure that Kiribati remains in full compliance with its obligations under the Montreal Protocol in coming years and ensure it meets the 2005 Regional phase-out target.

Any import license scheme will require co-operation from the importers and the Customs Officers. It may also require amendments to the Harmonised System (HS); an internationally agreed upon system of classifying trade goods and recording import statistics that Kiribati uses to allow identification of individual controlled substances.

An import license scheme will be necessary for HCFCs for tracking purposes. This will be implemented at the same time as the license system for CFCs. These licenses will be issued on demand; with no restrictions on the quantity imported, but the actual quantities of HCFCs imported will be required to be reported to the MESD.

Controls on the remaining substances are necessary to ensure ongoing compliance with the Montreal Protocol. The government will prohibit the import of all halons, “other CFCs”, 1,1,1-trichloroethane (methyl chloroform), carbon tetrachloride, and hydrobromofluorocarbons (HBFCs). None of these substances are known to have any use in the Kiribati. Some such as the “other CFCs” and the HBFCs are no longer manufactured.

In case there are some unforeseen demands for CFCs or any other ODS other than HCFCs, the regulations will also allow imports for "essential uses" provided that the MESD approves these.

In addition to prohibitions on the import of the "bulk substances" the Government will develop regulations to prohibit the import of both new and second hand products containing CFCs, such as refrigerators and freezers. This is to avoid receiving “junk technology” and to reduce future demand for CFCs to service the equipment.

Financial incentives
The Government will investigate the possibility of introducing financial incentives to promote the use of non-ozone depleting substances to replace CFCs through reductions in import duty and such like. It will also investigate the possibilities of reducing import duties on equipment such as recovery and recycling machines needed to protect the ozone layer.

Training Programs and Workshops for Refrigeration Technicians
To successfully introduce the new non-CFC refrigerants into Kiribati will require new skills for technicians. The new refrigerants require new handling procedures and new lubricants. It will be vital that training is provided quickly if Kiribati intends to implement a phase-out date of mid-2002. It will also be important that technicians have the necessary skills to fix leaks in existing equipment, rather than continuing to simply add new gas to equipment without fixing the leak.

It is proposed that a training programme be developed to teach these skills. The courses would teach recovery and recycling and good engineering practices as well as issues relating to the legislation and ozone depletion. Those who attended would receive free or subsidised training. There are currently no suitable training facilities in Kiribati. It is expected that training will be provided by a suitable qualified trainer from overseas for all of the Kiribati technicians as part of the SPREP regional Strategy. Once the current technicians are trained they will be responsible for training any new entrants to the trade.

The trainer will develop a course in consultation with MESD and deliver this in Kiribati in 2002 or early 2003.

Training for Customs Officials
Kiribati does not produce any CFCs and therefore all of its CFC consumption must be imported. It follows that border controls will be vital to ensure that the Government's policies are implemented. In particular it will be important to ensure that CFCs are not smuggled into Kiribati. If illegal imports of CFCs become common or widespread, it will undermine the whole NCAP by postponing the phase-out and by penalising those who remain law abiding.

To successfully implement the licence scheme it will be vital that Customs Officers from the Department of Customs and Excise are trained to recognise CFCs and their alternatives. This training should be provided once regulations are in place.

It is expected that training will need to be provided by an overseas expert. This training should take three or four days to complete and would include training on the relevant Kiribati legislation, the Montreal Protocol, recognition of packaging and storage containers and training in the use of the CFC detection equipment.

As well as the provision of training, it will be important to provide portable CFC detection equipment. Field officers will be provided with hand held identification equipment and where there is doubt about the accuracy of labelling they will send samples to a central laboratory (possibly in Australia or Fiji) for legal testing. The training providers should also assist with the development of policies for sampling of shipments of refrigerant gases.

It is recommended that two units be provided as their are two major ports, one on Tarawa and one on Kiritimati Island. The unit in Tarawa would then be available for use by the refrigeration workshops when not in use by Custom's staff.

Training of customs Officers and provision of the detection equipment will be provided under the SPREP Regional Strategy and will be co-ordinated with other Customs forces in the region. All of the costs for this training will be met as part of the Regional Strategy.

Recovery and recycling machines
The use of recovery and recycling equipment allows workshops to re-use any CFCs that are extracted from the customers' vehicles at the time of servicing. Any CFCs that are recovered can be re-used, either in the same piece of equipment or in another piece of equipment later on. This is done instead of releasing the refrigerants to the atmosphere, as is the case in all workshops in Kiribati at present.

Following the workshops by the International Consultant and by MESD in preparing this strategy, there is a high level of interest among Kiribati technicians in being able to obtain recovery and recycling equipment for use in their workshops. The very high cost of recovery and recycling equipment deters most small workshops from acquiring these at present.

The Government wishes to request funding, through the Multilateral Fund and the SPREP Regional Strategy, to be able to offer a 50% subsidy on the cost of purchasing these machines. If this approved, the subsidy would only be offered to companies whose technicians have completed the approved training course. Funding would be sought to allow the purchase of up to 5 units at a cost of US$2,500 per unit (i.e. a subsidy of US$1,250 per machine)

The Government would only allow the subsidy for technicians who had received training from the Government approved course.

Public awareness
Aside from developing regulations, public education would be a key task of the "Ozone Officer". There is currently little or no awareness of the Montreal Protocol among the general population or among most politicians.

Creating awareness of the Montreal Protocol will be a very important part of the strategy. It is vital that the public understands why CFCs are being phased-out and what they can do to assist in this process. The ongoing project to bring electricity to the outer island also has the potential to increase demand for refrigeration equipment. It is important for the consumer that they understand why any "new" second-hand equipment that are imported should not contain CFCs.

There is already a considerable body of material available from UNEP already, but these needs to be translated into the local language first.

It is expected that appropriate, Pacific focussed, public awareness materials, can be provided through the SPREP Regional Strategy. In particular assistance will be need for translating materials into the local language.

3.2.3 Roles in Implementing the Strategy

The lead agency for implementing and managing the NCAP will be the National Ozone Unit under the MESD. Given the complexity of the project it will be necessary to collaborate with a number of organisations. The principal organisation will be the Customs and Taxation Department which will enforce the proposed regulations controlling the importation of ODS. The Customs Department will also be involved in collocation of import data through administration of import permits.

3.3 Timeframe and Consumption Implications of Action Plan

3.3.1 Timetable

The schedule for implementing activities to meet the Protocol objectives and its effects on ODS consumption is presented in Table 3.1. Of these activities, the ones that will lead ensure continued zero consumption levels are:

1. Monitoring of ODS imports and exports through a licensing system, new CFC detection equipment, and well-trained Customs Officials.
2. The training of technicians in good service practices and the use of recovery and recycling equipment and retrofitting.
3. Fiscal policy measures to encourage the development of economically viable and attractive ODS free technologies.
4. Ban the use of ODS based technologies in new installations.

Table 3.1 Schedule for the Action Plan

Action	**Description**	**Schedule**	**Impact**	**Implementing Agency**
1	Establishment of NOU office	Mar 2002	Enabling Activity	MESD
2	Establishment of National Ozone Committee	Mar 2002	Enabling Activity	MESD
3	Public Awareness and Education	Nov 2001	Enabling Activity	MESD
4	Establishment of Licensing System	Dec 2001	Regulation on Restricted Imports and Exports	NOU Customs Department Attorney General's Office
5	Establishment of Monitoring System	Jan 2002	Data Reports under Article 7	Customs Department NOU
6	Training of trainers	2002	Reduction of Consumption	NOU MESD
7	Training of Customs Officials	2002	Reduction of Consumption	NOU MESD Customs Department

8	Training of technicians	2002 2003	Reduction of Consumption	NOU MESD with Refrigeration Engineers and Technicians
9	Consideration of tax incentives to promote use of substitutes and alternative technologies	July 2002	Reduction of imports and usage of CFC	NOU Customs Department Attorney Generals Office Department of Finance
10	Ban on new installations and equipment using controlled ODS	Jan 2002	Elimination of new demands	NOU Customs Department Attorney Generals Office Chamber of Commerce

3.3.2 Consumption implications

Kiribati has already achieved zero consumption because of the actions of other countries in the region that supply imported goods to Kiribati. The actions set out in this plan are to ensure that Kiribati maintains its zero consumption and its status of full compliance with the Montreal Protocol. The Government notes that although the supply of CFCs has ceased, there is still demand. If the actions set out in the NCAP are not taken and if an alternative supply of CFCs is established by importers, then Kiribati could quickly find itself in a position of non-compliance.

3.4 Budget and Financial Program

The implementation and management of this NCAP has as a prerequisite the establishment of a National Ozone Unit (NOU) office. For this purpose, a National Support Project is submitted for approval as part of the SPREP Regional Strategy. Funds allocated through the regional Strategy will be used to co-ordinate public education campaigns, operate and staff the NOU office, train technicians and Customs Officials, drafting of legislation to control ODS import and purchase new CFC recovery and recycling and detection equipment.