#### MARSHALL ISLANDS NATIONAL ENERGY POLICY 2002

#### **National Vision**

The 2<sup>nd</sup> Economic & Social Summit 2001 adopted the following as the National Vision for the Republic of the Marshall Islands in the next 15 years:

"To be come a country with an interdependent world, with an enhanced socioeconomic self-reliance, an educated, health, productive, law-abiding and Godfearing people and in which individual freedom and fundamental human rights are protected and culture and tradition are respected and development and environmental sustainability are in harmony."

### **Energy Sector Vision**

Available, affordable, reliable and sustainable energy for social and economic development for all the people of the Marshall Islands.

## Introduction

The Government of the Marshall Islands through the 2<sup>nd</sup> National Economic & Social Summit 2001, highlighted its strategies for achieving economic and social development and these include, "increased self-reliance, renewed economic growth, enhanced employment opportunities, alleviating poverty through a balanced and more equitable distribution of income, environmental sustainability and improved health standards, education services, enhanced competitive skills and change of attitudes." The National Energy Policy for the Marshall Islands is one of the instruments that is put in place to assist the government to achieve the above development goals. The National Energy Policy consists of six core areas and these are: National Coordination and Planning, Renewable Energy/Rural Electrification, Power, Petroleum, Energy Efficiency and Conservation and Transport. Each core area has an introductory section explaining what this core area is about and is followed by the policy statements. The policy statements basically state the objectives of each core area and it is to be noted that to achieve the objectives, strategies and action plans have to be developed. This document

is specifically for the policy statements and that the strategies and action plans will be part of a separate document referred to as the National Energy Policy Guidelines. The National Energy Policy Guidelines will explain in detail the intent of the policy and how the energy policy is to be implemented.

There are two crosscutting issues that need to be considered in the context of the Marshall Islands Energy Policy - they are environment and capacity building. Environmental issues are increasingly emphasised in all national development programs. The link between energy production and use to global warming and sea-level rise places more pressure on the Marshall Islands to consider environmental issues in national energy policy and planning. By incorporating environmental considerations into the energy policy, the negative environmental impacts can be lessened through fuel substitutions, greater share of renewable energy resources in the energy mix of the nation, promotion of energy efficiency programs, etc to name a few. The reduction of Greenhouse Gas (GHG) emissions from petroleum fuels used in transport and electricity generation is an important government goal. The safe disposal of waste oil and solar batteries are both key issues and significant environmental concerns for the Marshall Islands.

Equally an important consideration for a good energy policy is human and institutional capacity building. As highlighted in the  $2^{nd}$  National Economic & Social Summit 2001 human resources are seen as the most important resource in the achievement of the national vision. To ensure that the energy sector in the Marshall Islands is effectively planned and managed, it needs an institutionalized structure that is staffed with well-trained energy planners, engineers, technicians and managers.

# 1. National Coordination and Planning

Recognizing the importance of energy planning and development in achieving overall sustainable development, the Government of the Republic of the Marshall Islands sees the establishment of an Energy Planning Division within the Ministry of Resources and Development as imperative. The implementation of Marshall Islands National Energy Policy requires an appropriately staffed and resourced Energy Planning Division. Therefore it is necessary to create new staff positions

and strengthen the Energy Planning Division. The Energy Planning Division will be responsible for planning and implementing the national energy programs especially the development and implementation of appropriate energy policies in order to achieve the overall national development goals. The Energy Planning Division shall consult as required, relevant Government ministries and departments, power utilities, suppliers, public and private sector, non-government organizations and relevant regional and international organizations on energy issues.

## **Policy Statements**

- Coordinate national energy planning and programs.
- Review and implement the national energy policy as and when appropriate.
- Promote partnerships between private and public sectors in the implementation of energy programs.
- Investigate opportunities available under regional and international cooperation (e.g. Kyoto Protocol – Clean Development Mechanism, Carbon Trading, etc.) to improve access to reliable, affordable, economically viable, socially acceptable and environmentally sound energy services.
- Ensure the standardization of renewable energy equipment, especially solar equipment used in the Marshall Islands.
- Establish a national energy supply and demand database.

# 2. Renewable Energy/Rural Electrification

Renewable energy is the most appropriate long-term alternative source to replace imported petroleum products for electricity production in the Marshall Islands; solar photovoltaic (PV) is already technically and financially attractive for relatively small remote island demands when properly planned, operated and maintained. Some individuals have a basic knowledge of renewable energy and

have demonstrated the viability of solar and wind for home and remote applications.

In the early 1990's through a donor funded solar program the Government of the Marshall Islands installed some solar PV home systems in the Namdrik atoll. As part of this program local personnel were trained through courses and workshops locally and overseas. With recent improvements in the cost and reliability of solar PV technology, new projects are now being developed with the expectation of eventual commercial operations.

## **Policy Statements**

- Investigate and assess the potential for renewable energy sources available in the Marshall Islands.
- Promote the use of proven renewable energy technologies, especially solar photovoltaic as a power source in rural areas.
- Promote the use of solar water heaters particularly in Majuro, Ebeye and the growing hotel industry.
- Establish a financial, legal and institutional framework for implementing rural electrification projects in the outer islands.
- Ensure that batteries used for solar rural electrification systems are recycled or disposed off in an environmentally and safe manner.
- Establish an appropriate management mechanism for renewable energy covering operation, maintenance and cost recovery.

### 3. Power Sector

Power in the Majuro atoll and two other outer islands (Jalut and Wotje) is provided by the Marshalls Energy Company (MEC). In these three atoll groups power is available on a 24 - hour basis. The Government of the Marshall Islands recognizes the importance of a commercially orientated power utility and to this end is very supportive of the development plan of MEC. It is government policy to assure that MEC continues to operate as a commercial entity with tariffs that

recover full costs while assuring that low-income consumers can afford basic services. It is also government policy to review MEC amendments and regulations to encourage more effective use of electricity through appropriate conservation and demand side management (DSM) measures, not just more efficient supply.

The Marshall Islands Government would like to see that all Marshallese have access to electricity by 2010.

## **Policy Statements**

- Promote the more efficient end-use consumption of electricity.
- Ensure that the views of the Ministry of Resources and Development as ministry responsible for energy development in the Marshall Islands is represented in the MEC Board through representation of the Secretary for Resources and Development or his representative.
- Ensure that any power development project (including system expansion to existing ones) in the Marshall Islands is based on least cost development that incorporates demand side management to reduce peak loads and conserve fuel and supply side management to reduce generation and distribution losses.
- Ensure that MEC charges an appropriate tariff level (based on full cost recovery) to promote both economic and social development.

#### 4. Petroleum Sector

The Marshall Islands is heavily dependent upon imported petroleum fuels. Last year 2002 the Marshall Islands imported an estimate of 14,756,184 million gallons of petroleum fuels, not including MEC's import at a total cost of 11,190,533 and this is an increase of 35% from the year 2001 import. Petroleum fuels are supplied into the country by two companies - Mobil and the Marshalls Energy Company (MEC). MEC imports diesel fuel and Liquefied Petroluem Gas (LPG) and sells at wholesale price to customers such as Asian and American

fishing fleets and other consumers in Majuro and the outer islands. The price of petroleum fuels is determined by the fuels suppliers themselves without any government consultation.

The cost of fuel imports per unit volume should be minimized through good supply contract negotiations and management. The overall volume of petroleum imports should increase at a lower rate than economic growth through appropriate conservation measures.

A clean environment is crucial to the economic and social well being of all Marshallese. Irresponsible petroleum use and handling (spills, volatile emissions and waste disposal) can cause significant damage, particularly in fragile island coastal and marine environments. For this reason the proper importation, handling, storage and use of petroleum products and management of waste petroleum products is an important issue and potentially critical where waste oil and their heavy metal components end up in the food chain through ground water or reef fish.

#### **Policy Statements**

- Secure a reliable supply of petroleum products at minimum possible cost and conforming to agreed product standards and specifications.
- Minimise dependence on petroleum products by encouraging fuel conservation and efficient end-use.
- Ensure that petroleum storage, and handling facilities are provided to ensure that adequate supply is always available.
- Ensure a reliable, cost effective supply of petroleum products to rural areas.
- Establish and enforce a clear guideline for fuel pricing in the outer islands.
- Ensure the safe transportation, handling and storage of petroleum products including appropriate waste-oil disposal to minimize adverse environmental impacts.
- Establish and enforce clear guidelines for the efficient use and maintenance of the Government vehicle fleet and ships

# 5. Energy Efficiency and Conservation

The primary focus of the Energy Efficiency and Conservation program is to optimize the energy demand without adversely affecting the economic and social well being of the people of the Marshall Islands.

- Initiate and develop energy efficiency programs in both public and the private sectors.
- Promote energy star ratings for white goods sold in the Marshall Islands.
- Develop and disseminate widely good quality information about the benefits of energy efficiency and conservation.

# 6. Transport Sector

In the Marshall Islands, the transport sector is the biggest consumer of petroleum products with over 50% of the total petroleum imports consumed by sea and air transport. Road transport is increasing with about 3000 vehicles (1999 figure) running on a total of 75 miles of road. Majuro accounts for about 35 miles of the road and a big share of the registered vehicles.

International shipping services are serving the Marshall Islands through Majuro and Ebeye ports linking the Marshall Islands with the US West Coast, Hawaii, Federates States of Micronesia and the Far East. Inter-atoll and intra-atoll shipping services are provided by Government, private companies and individuals. However, Government, through the Ministry of Transport and Communications (MOTC) provides the main means of shipping service to the outer atolls.

Air transport include international and domestic are services. International air services provide linkages with outside world through Hawaii, Guam, Federated States of Micronesia and Tarawa in the Republic of Kiribati. The domestic services are provided by the Airline of the Marshall Islands (AMI).

# **Policy Statements**

- Promote emission control regulations and effective enforcement procedures.
- Promote vehicle efficiency standards and encourage the importation of more efficient vehicles.
- Develop a framework for greater use of appropriate and energy efficient modes of transportation with emphasis placed on sea and land transport.