

FOREWORD

Energy is not an end in itself, but an important entry point for achieving the goals of the three pillars of sustainable development: social equity, economic growth and environmental protection. Energy, in other words, is central to concerns about sustainable development. It affects practically all aspects of social and economic development, including livelihoods, water, agriculture, population, health, education, job creation and gender-related issues. Unfortunately, current patterns of energy production and consumption have direct negative impacts on the environment and natural resources at the local, regional and global level. In order to achieve development objectives, conventional approaches to energy must be reoriented toward the promotion of energy systems, among others, based on renewable energy, energy efficiency and conservation, and cleaner fossil fuel technologies, which will make it possible to address social, economic and environmental concerns simultaneously.

With regard to the energy sector in Tokelau, several major interventions and changes have been underway during the last many years and more are being planned for the future. This underlines the priority the Government of Tokelau in recent years has given to the development of the energy and the power sector in particular. But until now energy interventions have been prepared, designed and implemented without a national energy sector framework. There has thus been no overall framework within which to plan and make decisions for action. For there to be direction to energy interventions, there must be some overall guidelines established. Without a policy backdrop and an overall strategic orientation, interventions easily become arbitrary, inconsistent, haphazard, counter productive and focused on the short term.

It is the belief that this, Tokelau's first National Energy Policy and Strategic Action Plan (NEPSAP) will provide needed overall direction and assist to prioritise interventions. It will provide a practical blueprint for Government of Tokelau to provide leadership in planning and management of the nations energy sector. It will improve planning and management of Tokelau's energy sector and ensure consistency of efforts towards Government approved national goals and aspirations. The preparation and adoption of the NEPSAP therefore will assist Tokelau in ensuring the delivery of consistent long-term energy sector development. Since the world is always changing and experience is our best mentor as we move along the road of sustainable development there of course also will be a need to finetune and revise the NEPSAP. As with the preparation of this policy document, such changes will be based on extensive consultations. It is the intention, though, that the overall framework outlined will remain appropriate for some time to come.

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INTRODUCTION: THE POLICY CONTEXT

An energy policy for Tokelau must recognise the constraints of small population, small land area, limited developable indigenous energy resources, and its unique governmental structure. Generic Pacific Island policy papers developed by regional organisations can provide useful concepts for this Tokelau energy policy document but cannot be directly applied. Therefore the National Energy Policy and Strategic Action Plan (NEPSAP) considers these seven conditions specific to Tokelau:

1. Tokelau is de facto a federation of three roughly equally sized independent political entities. The primary focus for government in Tokelau is the Taupulega, the Council of Elders, on each island. The National Government has limited authority and mainly provides financial and technical support to the three Taupulega and provides a unified interface for external affairs.
2. There is no rural population. All population on each of the three atolls is concentrated in a single urban complex and all households receive essentially the same quality of energy services.
3. Physical communication between islands depends on ship schedules and is too time consuming to allow timely technical support from outside an island. This makes it necessary for each Taupulega to develop its own human resources for energy systems operation and maintenance and to establish its own system of tariffs and administrative structures for energy.
4. The public energy supply system is completely dependent on imported fuel. There is some use of solar energy for TeleTok and to support the University of the South Pacific (USP) extension centre on Atafu but all public energy supply is through petroleum for outboard motors and diesel fuel for power generation, larger boats, and land transport.
5. Land transport energy use is insignificant. The population on each atoll is concentrated in a very small area and vehicular transport is only needed for the movement of heavy goods around the village.
6. Freezers, refrigerators, washing machines, video systems and outboard motor powered boats are owned by a high percentage of households making the average household use of energy much higher than is typical of the Pacific Islands in general.
7. The majority of Tokelauans are living in New Zealand.

This national policy paper has been developed using these four assumptions:

1. That the ownership, operation, and maintenance of electricity power systems will remain with each of the three Taupulega.
2. That there is agreement by the three Taupulega to accept and enforce a national set of safety, maintenance, and system monitoring standards common to all three islands.

3. That tariffs will be set individually by each Taupulega but that the Taupulega will place strong weight on advice from the Department of Energy Manager/Energy Planner.
4. That any programmes for energy conservation will be determined and carried out individually by each Taupulega but that the advice of the Department of Energy Manager/Energy Planner will have considerable weight.

POLICY GOALS

The government of Tokelau has two long-term goals for energy development that are guiding the NEPSAP. These are:

1. Achievement of energy independence through the development of indigenous energy resources.
2. Provision of affordable, high quality electrical power to all residents.

In addition the following short and medium term sub-goals also are addressed in the NEPSAP:

1. Minimise the waste of energy resources without reducing the quality of life of Tokelau resident. Tokelau has one of the highest energy costs in the Pacific due to its difficulty of access and very small market size. Any waste of energy is a serious waste of money and development resources.
2. Minimise environmental damage due to energy development or use. The environment of Tokelau is fragile and easily damaged by oil spills, inappropriate land use, and pollution of land, air, and water.
3. Minimise the need for continuing energy operation and maintenance supply subsidies. In order for there to be rational use of energy by Tokelau residents, their payment for energy should be in accordance with its real cost. Also, providing subsidies for energy prevents the funds used for subsidies from being used for education, health or other services that are more socially important than energy provision.
4. Minimise the need for external assistance for energy systems operation and maintenance. The time required to obtain external assistance is typically measured in weeks or months and unless local persons can operate and maintain the energy systems on each of the three atolls, reliable services cannot be provided. This implies the need for installing technically simple energy systems that use standardised components so rapid repairs can be made and spare parts requirements simple.
5. Interventions to fit the cultural, political, and physical conditions present in Tokelau. If the policies and strategies do not fit the conditions in Tokelau, they will not be implemented and are therefore useless. In particular it must be the goal of policy development that it is in a form that allows its primary implementation to be at the Taupulega level.

Roles of Policy at the National Level

The roles of the National Government in energy are primarily to provide technical support to the Taupulega on each atoll by having on staff persons who have a higher level of technical training and experience than can typically be retained by each of the Taupulega. Specific roles are to provide advice to the Taupulegas in the development of tariffs, development of projects for energy development, establishment of a common set of standards for energy system installation, operation, and maintenance. Other roles are developing training programmes for power system technicians, developing processes for environmental impact assessments for energy systems, reviewing energy system operations on each island, providing recommendations for actions to improve operations, and interfacing with external organisations where energy matters are being considered.

POLICY SUMMARY

Policy Focus	Policy Statement
Energy Planning and Regulation	<i>(Implementation by National Government)</i> To create and maintain an institutional structure appropriate for energy planning and development capable of developing and enforcing standards for energy safety and environmental protection, developing and enforcing uniform procedures for proper operation and maintenance of energy systems and advising The Council for the Ongoing Government and the Taupulega in matters of rational energy use, the development of energy resources and the establishment of rational tariffs for energy supply.
Electrical Power	<i>(Implementation by National Government)</i> Support the introduction of commercially proven technologies and generating systems that are environmentally, economically, financially and socially viable while avoiding energy development projects that are experimental, overly complex or use components that have not been successfully used for more than 5 years in similar projects for other Pacific nations. <i>(Implementation by Taupulega)</i> Optimise the efficiency of electricity production, transmission and distribution.
Energy Efficiency in Electricity Use	<i>(Implementation by Taupulega)</i> Require all electricity connections to be metered and charged according to metered use. <i>(Implementation by National Government and Taupulega)</i> Optimise the use of electricity through incentives for the use of energy efficient lights and appliances by government and households. <i>(Implementation by Taupulega)</i> Air conditioning is recognised as a major problem for energy supply and will only be used after careful consideration by the Taupulega and with their express permission. <i>(Implementation by National Government)</i> All new major buildings and development projects are to be examined carefully during their design phase for their energy use requirements and designs will be such as to minimize energy use without reducing the benefits of the building or development and to ensure that the existing power system will be capable of adding the operating load without affecting the system reliability.
Energy Independence	<i>(Implementation by National Government and Taupulega)</i> To work toward independence from imported fuels by progressively increasing the use of renewable energy with the ultimate goal of 100% renewable energy for Tokelau.
Transport Energy Efficiency	<i>(Implementation by National Government and Taupulega)</i> Optimise the efficiency of use of fuel for boat and ship transport.
Petroleum	<i>(Implementation by National Government and Taupulega)</i> Optimise the supply and storage of petroleum to maintain good fuel quality and minimize the risk of supply outages.
Energy and the Environment	<i>(Implementation by National Government and Taupulega)</i> Support international action on reduction of emissions that may cause climate change and ensure that all energy services are provided with a minimum of risk of environmental damage to Tokelau.
Local Capacity Development for Energy	<i>(Implementation by National Government)</i> Minimise dependence on external energy advice and expertise.

ENERGY POLICIES AND STRATEGIES FOR THEIR IMPLEMENTATION

Energy Planning and Regulation Policy

***(Implementation by National Government)* To create and maintain an institutional structure appropriate for energy planning and development capable of developing and enforcing standards for energy safety and environmental protection, developing and enforcing uniform procedures for proper operation and maintenance of energy systems, and advising the Council for the Ongoing Government and the Taupulega in matters of rational energy use, the development of energy resources and in the establishment of rational tariffs for energy supply.**

Justification. While it is recognized that each atoll has the independent responsibility to deliver energy services according to the specific needs and wishes of their residents, it is also recognized that it is not practical to assume that each atoll has available locally the complete set of skills and experience needed to develop and operate modern energy delivery systems. There is significant risk of death or injury to persons and damage to the environment due to improper installation and operation of energy production and delivery systems and the operating cost can be greatly increased if well proven methods of operation and maintenance are not followed. It is also clear that the atoll energy systems managers need external assistance in their development of energy efficiency measures, rational tariffs and accountable management systems.

Strategy for Implementation. At the national level, establish the job positions and hire personnel to be responsible for general energy planning, electric power planning and maintenance development, and develop specific standards for electric power installation and operation and for fuel storage and transport. The staff would act as a national interface with New Zealand and donor agencies for energy development. Staff would develop guidelines for the Councils of Elders to establish rational tariffs along with operational and maintenance procedures for energy supply.

Electrical Power Policy

***(Implementation by National Government)* Support the introduction of commercially proven technologies and generating systems that are environmentally, economically, financially and socially viable while avoiding energy development projects that are overly complex, experimental or use components that have not been successfully used for more than 5 years in similar projects for other Pacific nations.**

Justification. Many Pacific Island Countries have had the experience of being advised to use energy systems equipment that has proven to be unsuitable for the difficult environment of a Pacific tropical atoll. This has been particularly true of renewable energy equipment though also seen in the supply of conventional energy systems. Given its difficult access, small number of persons skilled in energy systems and the high time and money cost of repair and replacement of components, it is important that Tokelau only allow the use of energy system components that have clearly been proven in other similar Pacific island countries conditions for an extended time. Since in most cases, components that are not appropriate to the Pacific atoll conditions will fail within three to five years, it is reasonable that the Government only allow the installation of energy system components that have at least five years of successful use in comparable Pacific Island Country use. It is noted that manufacturer warranties are often of little value in Tokelau due to the high cost of making the replacement of a failed component. It is usually difficult to prove that the component failed due to manufacturer rather than user causes and then, if the claim is successful, replacing that component can incur a cost as great or even greater than the component itself. So selection of materials should not be based on manufacturer claims of warranty replacement for failed parts.

Strategy for Implementation. When considering expansion or modification of the power system, require the agencies contracting for the design to evaluate the use of non-conventional energy on a life cycle cost basis but require that any designs use only equipment well proven to be reliable in the Pacific island context.

(Implementation by Taupulega) Optimise the efficiency of electricity production, transmission and distribution.

Justification. For every kWh of electrical energy generated, a portion is inevitably lost. While it is impossible to completely eliminate those losses, they can be reduced, often dramatically. However, there is a cost to improving energy delivery efficiency that tends to go up for each added improvement in efficiency and there is a level of loss that is economically optimum. It can be a reasonable goal of government to determine the level of loss in electrical energy production, transmission and distribution that is economically attainable and strive to reach that level of operational efficiency. The first step in improving the cost effectiveness of the electricity system is effective monitoring of its operation. Once monitoring has provided the needed information for analysing the system operation, then proposals for improvement can be made. However, the skills necessary to analyse the operating data and propose effective and optimum improvements are not likely to be available within Tokelau. Therefore an external advisory project will be initially necessary to establish the proper monitoring procedures and to develop methods for keeping the electricity system efficiency optimised that can continue to be used by Tokelau energy planning staff and the Councils of Elders.

Strategy for Implementation, National Level. Develop an external advisory project to propose economically attainable operating efficiency goals, establish procedures for monitoring technical losses and implement them in the electrical production process. Where technical losses are greater than the goals, develop projects for system improvement for loss reduction to meet those goals.

Strategy for Implementation, Taupulega Level. Implement processes for monitoring power system operations including at least kWh generated per hour, kWh metered per fortnight, and fuel use in litres per hour. With technical support from the Department of Energy, work to lower technical losses. Eliminate all non-metered power use to lower non-technical losses to a minimum. Work to meet established national standards for power generation efficiency and where standards cannot be met, work with Department of Energy to develop procedures and install the necessary equipment to meet the standards.

Energy Efficiency in Electricity Use Policy

***(Implementation by Taupulega)* Require all electricity connections to be metered and charged according to metered use.**

Justification. Energy waste reduction cannot be a success without all users knowing the amount of energy being consumed and therefore all use should be metered. While it is true that for public buildings, the Taupulega will effectively be paying itself for electricity bills, they need to know their real cost of supplying energy to those buildings.

Metering of all electricity use is a policy also justified by the need to fully understand energy use for energy planning purposes. Only through metering of energy is the actual energy use by a site known. Additional justification is that the level of energy waste and its cost to the community is increased when users do not know (or have to pay) on the basis of their actual electricity use.

Strategy for Implementation. The Department of Energy will have to provide the meters and possibly assist the Taupulega in their installation. Taupulega will have to ensure that all meters are read and that users are promptly billed for actual power usage.

***(Implementation by National Government and Taupulega)* Optimise the use of electricity through incentives for the use of energy efficient lights and appliances by government and households.**

Justification. The decision to provide heavily subsidized energy to households carries with it the problem of energy waste since the cost seen by the user is far below the cost of the energy itself. Government currently pays around \$1.00 of the cost of every unit of electricity used in Tokelau. The amount paid by Government for electricity use is more than double the amount paid by the users themselves. Therefore it makes sound economic sense for Government to invest in energy efficiency measures, even to the point of paying part of the cost of household appliance efficiency improvements since the long term cost to Government will be lower than the continued use of low efficiency appliances.

In Tokelau there is a high level of electricity waste as seen by the use of large wattage lights as the basic unit of lighting, the use of oversized freezers containing largely goods that have been purchased from the local store, the indiscriminate use of electricity for

cooking and the use of high wattage computer monitors that operate continuously during working hours.

Strategies for Implementation:

1. *Lighting efficiency improvement.* For lighting efficiency improvement, the Government will purchase a quantity of efficient, electronic ballast fluorescent lights and offer them at a reduced cost to households (including installation) to replace existing lights initially as a trial. The replacements could even be at no cost and the Government will still save money over the long term due to the need to pay a reduced power subsidy and the improved power factor for the generation system that will result in lowered generation losses. Note that it will be vital that local stores maintain a stock of proper replacement bulbs and fixtures.
2. *Energy efficiency for cooking.* Ban large electric stoves from import. Discourage the use of all electric cooking appliances through public information about the high cost of their use and their negative effect on the electric power system's reliability. If a ban is not possible, Taupulega should consider imposing a substantial electric cooker annual user fee. The Department of Energy can build a portable electric meter that can be placed on the supply to an electric cooking appliance and temporarily install it in houses of persons with high electrical cooking demands to show the real portion of the user's bill that comes from cooking with electricity.
3. *Replace electricity for cooking with more efficient Liquefied Petroleum Gas (LPG).* Currently to obtain LPG, individuals must make their own arrangements for purchase and shipping from Samoa. Taupulega should arrange for the organised import of LPG through the existing store system to make its use lower in cost and more convenient. The cost of LPG delivered to Tokelau can be reduced through bulk delivery and local tank filling or, as Niue has done, arrange a bulk quantity discount with an overseas supplier of filled tanks for the exchange of empty tanks for filled ones. Import for sale small and medium sized gas cookers.
4. *Improve freezer efficiency.* Freezers are by far the single largest user of electrical energy in Tokelau. Significant improvements in use efficiency are possible through the replacement of low efficiency units with those designed to operate more efficiently. The Department of Energy can, possibly with external technical assistance, locate a reasonably sized, high efficiency freezer and import a number of them for sale at cost to households. Even selling somewhat below cost will result in substantial long-term savings for Government due to the reduction of expenditures on power subsidies. This approach would allow insuring that replacement and new freezers would be sized appropriately and would be of a high efficiency design. Also having essentially the same freezer model for a large number of households would greatly ease the problem of their repair and maintenance.
5. *Graduated tariffs.* The Department of Energy should encourage Taupulega to institute graduated electricity tariffs so that the inefficient use of appliances that results in inordinately high power use would cost much more than their efficient

use. The tariff should allow the use of “essential” appliances at the cheapest rate (recommended is about 100 kWh/month of use at the subsidised base rate) but for anything above that base amount the rate should preferably be at the full cost of generation and in any case should at least be double that of the base rate so it can be effective in energy conservation. Doubling the tariff above the 100 kWh/month level would result in a 10% increase in total bill for every 5% increase in energy use above the base level so moderate use of electricity above the base amount would have little effect on the total bill but excessive use would be increasingly penalized.

6. *Computer energy efficiency.* For the purchase of new computing equipment, specify low power flat panel displays instead of conventional cathode ray tube (CRT) type units. The flat panel units are less sensitive to the Tokelau environment and their cost difference will be returned as energy savings within two to three years. In addition set computers to automatically turn off displays and shut down hard disks if not used for 15-20 minutes.

(Implementation by Taupulega) Air conditioning is recognised as a major problem for energy supply and will only be used after careful consideration by the Taupulega and with their express permission.

Justification. A major problem for the smaller power systems in the Pacific island countries has been the proliferation of air conditioning systems. These installations have almost exclusively been for the comfort of government employees. This often has been “justified” on the basis of the need for computers and other office equipment to be operated in a controlled environment. There is good evidence that there is little difference in the maintenance requirements for desktop computers that are operated under ambient conditions with those of computers in an air-conditioned space. Certainly it is difficult to justify the high cost of air conditioning on the basis of anything but dramatically improved computer life since the annual real cost of installing and operating a room air conditioner in Tokelau is itself comparable to the cost of a new desk top computer. An additional problem with air conditioners is their relatively short life in the atoll environment. This results in high maintenance and replacement costs and environmental problems related to the disposal of failed units.

Strategies for Implementation:

1. Standards for air conditioning should be developed by the Department of Energy that specify a minimum energy efficiency rating and standards for installation of air conditioners that require condenser installation in shaded areas with good air flow around the heat exchange component. Where air conditioning is allowed by the Taupulega, only high efficiency, properly installed split system units should be the standard, not single unit “window” types. It is recognised that the split units cost somewhat more than integrated “window” units but using split units not only lowers energy use it also lowers maintenance costs and increases the operating life of the equipment thereby reducing the environmental problem of failed unit disposal.

2. Establish a review process that requires written justification for air conditioner installation. Taupulega approval would be required for any air conditioner installation. The units should be installed strictly in accordance with installation standards set by the Department of Energy and inspected by the Department of Energy for compliance with standards.

(Implementation by National Government) All new major buildings and development projects are to be examined carefully during their design phase for their energy use requirements and designs will be such as to minimize energy use without reducing the benefits of the building or development and to ensure that the existing power system will be capable of adding the operating load without affecting the system reliability.

Justification. Due to the small size of the generating systems, a single development project with significant electricity load can easily cause system instability and unreliability of the electrical supply. Major buildings, particularly for Government, have been constructed in several Pacific island countries that has become a major drain on resources due to inordinately high energy bills due mainly to the use of designs that are inappropriate to the local environment. All projects need to be vetted by someone capable of projecting the energy supply requirements of the project and determining: (a) if the project is likely to cause problems with the existing power system and (b) if there are changes that could be made to the project to reduce energy use without jeopardizing the utility of the project. While it is not practical to give the Minister for Energy the power of veto for projects based on energy use, there should always be an analysis of life cycle energy use by the Department of Energy and the stakeholders advised of the projected energy cost and of lower cost alternatives if practical. Of particular importance is the analysis of energy use when contemplating the purchase of ships. There is a very large variation in energy efficiency in ships. In particular, older vessels or those of military origin are often very inefficient in the use of expensive fuel.

Strategy for Implementation: Require external agencies, government agencies and local developers to submit concept plans for major buildings and development projects to the Department of Energy during the initial design feasibility stage for evaluation as to probable energy use. This will enable the timely modification of designs to reduce unnecessary energy use before the final plans are drawn. For major projects, seek external and independent analysis for energy use and cost or require project designers to show projected energy use complete with assumptions and analysis procedures that can be independently checked.

Energy Independence Policy

***(Implementation by National Government and Taupulega)* To work toward independence from imported fuels by progressively increasing the use of renewable energy with the ultimate goal of 100% renewable energy for Tokelau.**

Justification. The high vulnerability of Tokelau to foreign manipulation of prices and supply of petroleum products plus the importance of making a positive international statement regarding greenhouse gas (GHG) emissions makes the conversion of Tokelau's energy supply to renewable energy appropriate and economically reasonable. The initial step towards this long-term goal for Tokelau is the trial of the approximately 10 kWp photovoltaic (PV) 240 V AC stored power system for Fakaofu. This trial system is not so large as to create serious problems with the power system should there be difficulty in operating or maintaining the solar unit yet it is large enough to significantly reduce diesel fuel requirements and provide vital experience for local staff in operating and maintaining solar based power generation. Several years of experience with operating and maintaining the solar power system will be needed before Tokelau can confidently place reliance for power production on the solar generators. It is reasonable to gradually expand the system in stages over a 15-20 year period until finally solar is capable of supplying up to 70% of the electricity needs of Tokelau.

To achieve 100% of energy supply, a renewable substitute for diesel fuel will need to be developed. Coconut oil is technically feasible to use as a diesel fuel substitute with little processing and no modification of diesel engines. Therefore as the solar component of the electrical supply is being expanded, it will be appropriate to develop local coconut oil production to gradually replace diesel fuel for transport and for the electricity generation that cannot economically be provided by solar energy.

Strategies for Implementation:

1. At the time of installation of the solar power project for the Fakaofu electricity supply, develop and submit a project document to funding agencies for significantly increasing the solar component at the project site to bring the installation to at least to 30 kW delivery capacity and for providing 10-15kW of solar power generation on the other two atolls. Once those system are operational, a final project should be submitted to bring the Fakaofu system to supply 70% of electrical energy and to expand the other two atolls to 50-70% solar capacity.
2. Request funding for a detailed study of the use of coconut oil as a diesel fuel replacement in Tokelau. The study should build on the similar study for the Samoa Electric Power Corporation begun in 2004, the study by the Renewable Energy and Energy Efficiency Program of the Asian Development Bank in 2005 and the various trials of coconut oil as a diesel replacement in New Caledonia, French Polynesia, Vanuatu and Fiji. The study should take into consideration the land tenure issues of Tokelau that affect access to existing coconut resources, the limited labour availability in Tokelau, the effect of using a significant amount of those labour resources for coconut collection and processing and the fact that the

labour is concentrated in one place while the coconut resource is dispersed throughout the atoll.

Transport Energy Efficiency Policy

(Implementation by National Government and Taupulega) Optimise the efficiency of use of fuel for boat and ship transport.

Justification. Tokelau has one of the highest delivered fuel costs in the world. It is very poor practice to waste fuel under those conditions but at the same time, using fuel for boats and transport is an essential economic activity. Presently in Fakaofu where outboard engine use is highest, petrol is rationed to households at around 40 litres per month because of limited on-island stores. As stated elsewhere in this policy document there should be expanded storage of fuel on-island to lower the risk of running out, but that could lead to waste as people realize that more fuel is available and want access for additional non-essential use. To keep fuel use as efficient as possible, a system could be established that continues to allow for example 40 litres per month of petrol purchase at the normal price but also allows the purchase of additional fuel at double or more of the base price.

Since a major user of fuel is inter island shipping, money is also well spent on keeping ship engines well maintained and operating efficiently

Strategies for Implementation:

1. Through public workshops and information programmes, show outboard engine users that they can greatly reduce fuel use by not operating engines at high throttle. Since a reduction of speed of only 10% may result in a fuel use reduction of 25% or more, adding a minute or two to the trip time may be very cost effective.
2. For local boats, establish a ‘lifeline’ quantity of fuel that can be purchased at normal prices with a substantial premium charged for purchases of fuel above the monthly ration or simply make it policy to continue the fuel ration even though there is adequate supply available for greater use.
3. For shipping, establish a fuel use monitoring program that alerts management to increased or inefficient fuel use. Establish a maintenance programme for shipping that helps maintain optimum fuel efficiency.
4. Establish sporting competitions for traditional sailing canoe racing as is done in Kiribati. This would help increase the stock of sailing canoes on each island and help maintain the skills needed for subsistence fishing without the use of petrol.

Petroleum Policy

(Implementation by National Government and Taupulega) Optimise the supply and storage of petroleum to maintain good fuel quality and minimize the risk of supply outages

Justification. The present system of fuel shipping, storage and delivery was developed at a time when the quantity of fuel used in Tokelau was considerably lower than it is now. As the quantity of fuel used in Tokelau has increased, so have the safety hazards and environmental risks. These need to be urgently addressed through the establishment of proper fuel storage facilities and conformance with international standards for fuel transport.

Problems with water and dirt contamination occur regularly with Tokelau fuel stores and there is insufficient attention paid to the environmental hazards of fuel storage or transport. Fuel transport and storage are sometimes hazardous and the quantity stored within close proximity to housing has increased to a dangerous level. A serious fire in the fuel storage facility at Fakaofu would almost certainly result in the complete loss of many homes, damage to most and probable loss of life. Improved storage also can improve the reliability of engines and reduce their need for maintenance. Since the failure of an engine on a boat at sea can have serious consequences, storage methods that allow water and dirt contaminants in boat fuel are especially inappropriate.

Under the present petroleum delivery and storage arrangements, there is considerable risk of running out of fuel caused by shipping delays due to weather, accidents or ship repairs. Should there be major war in the Middle East or another oil embargo by OPEC, Tokelau will be at the end of the supply chain and can expect limited supplies of petroleum products to be available for an extended period of time. Therefore to maintain the reliability of energy supplies it is necessary to safely store in Tokelau a quantity of fuel equivalent to at least four or five typical shipments. The largest volume of fuel is required for the electrical generators and bulk storage should be developed for each power station. Sufficient stores of petrol and two cycle engine oil need to be maintained for outboard engine use equivalent to four or five typical shipments. To ensure that stored fuel remains sufficient, a system for fuel use monitoring and forecasting needs to be implemented so that ordering of fuel and storage capacity remains consistent with use patterns. To extend the time that Tokelau can sustain basic energy services should fuel supplies be interrupted, fuel use should be prioritized and a fuel rationing plan be developed and put into effect with high priority uses receiving first access to fuel stocks.

Strategies for Implementation:

1. Develop bulk fuel storage for all power stations with a minimum of one month of storage with refills from bulk stores every voyage that includes fuel delivery.
2. Establish a fuel use monitoring system to allow forecasting of fuel needs and establish fuel storage sufficient for at least two months of storage. Using New Zealand fuel storage standards and external technical assistance, develop a project proposal for a fuel storage facility on each atoll that meets all storage safety and

quality standards. Establish a process for replenishment of supplies at least every fortnight.

3. Prioritise petroleum uses and develop a rationing plan to ensure that vital services can be maintained for the longest possible time should fuel supply be interrupted.
4. Establish and enforce appropriate safety standards for fuel transport based on New Zealand standards.
5. With external technical assistance monitor the fuel transport process and fuel storage systems and ensure that they meet the required standards and train personnel in Tokelau in their continued maintenance.

Energy and the Environment Policy

***(Implementation by National Government)* Support international action on reduction of emissions that may cause climate change and ensure that all energy services are provided with a minimum of risk of environmental damage to Tokelau.**

Justification. It is clear that no matter what action Tokelau takes regarding emission control and greenhouse gas (GHG) reduction, it will have no measurable global impact. However given the consequences of global warming on Tokelau it is important that representatives be sent to international meetings on climate change to clearly express the seriousness of the problem. The statements, however, will only be effective if Tokelau does what it proposes other countries to do: develop its energy sector in a way that minimises emission of GHGs.

Strategies for Implementation:

1. Participate actively in international meetings relating to climate change and the environment.
2. Ensure that development plans include consideration of climate change and environmental affects by requiring an Environmental Impact Assessment (EIA) at the time of initiation of planning for any significant development project.
3. Through actions to develop renewable energy and energy efficiency show that Tokelau recognizes its responsibility to use energy in a manner that has the least impact on the environment and is an example to the countries that are in fact causing the danger to Tokelau of sea level rise and climate change through their irresponsible energy use.
4. Require all fuel storage and transport facilities to meet New Zealand standards for safety and reduction of risk of environmental damage.

Local Capacity Development for Energy Policy

***(Implementation by National Government)* Minimise dependence on external energy advice and expertise.**

Justification. With Tokelau's small population and limited access to specialist training and education, it probably is impossible for Tokelau to be completely independent of external advisors and technical support. However, it is possible to maintain a local staff competent to handle most problems of energy development, to develop proper terms of reference for external services, to critique the recommendations of external energy advisors and to competently act as an interface between Tokelau and external advisors. This will require an ongoing, long term training and education effort and a clear understanding of the specific skills necessary for local energy staff.

An important factor in the reduction of dependence on external expertise is the use of low technology energy systems. Since it is clear that personnel who have the training necessary to maintain high technology equipment will be difficult to retain in Tokelau because of competition from New Zealand and other countries, minimising the requirement for that class of personnel through the use of mature less complex technology that is "out of date" elsewhere makes good sense. There is a strong tendency for external power system designers to propose the use of highly automated, computerised control systems since they provide the highest possible efficiency of operation and are commonly used and work well in industrialised countries. This tendency should be resisted and low-tech control systems insisted upon wherever possible. Most high-technology control systems are not appropriate for Tokelau because: (1) they are sensitive to heat, humidity and in particular salt content in the air and, unless placed in an expensive to maintain climate controlled environment, will have reliability problems; and (2) it will not be practical to retain the necessary technical expertise in Tokelau for the control system troubleshooting and repair so external support will be needed. That results in high costs and potentially long repair times.

Although it is common to include good quality staff training at the time of implementing a new project, it often happens that when a replacement for the trained person is needed there is no source available for training and/or there is no money available to send the replacement for training. For the long-term success of projects, it is vital that there be a continuing source of training and the funding necessary to access that training. Starting in 2003, work began in several regional organisations on creating an ongoing training capability for renewable energy in the Pacific island countries. Tokelau should tap into any energy training institutions that are developed for the Pacific Region.

Seconding local staff to other countries in order to work with experienced energy staff can be of great value. According to the skill level to be attained and the complexity of the requirement, one month to six months of secondment may be necessary.

Complete localisation of energy expertise is not possible for the foreseeable future. Even with well-trained local staff, it is good practice to have an external audit of both the technical and management systems for energy operations. Having an external expert make an annual visit to Tokelau for that audit can prevent problems from compounding

and can help keep energy operations efficient and ensure that training and capacity development activities are adequate and rational.

Strategies for Implementation:

1. When designing energy systems, avoid high technology and complex designs that will require highly trained personnel for their troubleshooting and maintenance. Although automated control systems may appear to simplify operations and provide more efficient power system operations than manual controls, which is only true when they work properly. Their troubleshooting, maintenance and repair is usually complex and their use can lower system reliability and create a dependence on costly external expertise that is expensive and slow to access. The efficiency that is lost through the use of simple manual control systems can be more than recovered through shorter down times when systems fail and reduced repair cost.
2. Develop a human resources development plan for existing energy related staff by determining each staff person's job requirements, their past training and experience and what is needed to bring their capabilities in line with job requirements. Request assistance from external organisations to locate appropriate training programmes and for funding to send staff for training.
3. Actively work with regional organisations in the development of regionally based training facilities appropriate for the long-term development of the necessary skills for Tokelau energy staff.
4. Work with regional programmes and New Zealand to second local power system maintenance and operating personnel to Tuvalu, Niue, the Fiji Public Works Department or other operators of village scale power systems for on site training.
5. Establish a project for an external expert in small island electrification to visit Tokelau annually for on-the-job training, review of maintenance and operating procedures and to make recommendations for system improvements.

1. Ke he fakataulia na hihitemi e faigata ma manakomia he tino fakapitua mo te kikiilaga ka fatu he ata o he hihitemi malohiaga. E tuha lava pe ko na hihitemi pulipule otometi e veia e faigofo iio na hihitemi pulipule lima, e lelei oioti karai e ola lelei. Ka fai foki e hiaki ma fai ni fakaleleiga, e faigata ma he lelei ai te fakamoemoeigia o te hihitemi ma manakomia ai foki he tino fakapitua taukata ma maua gata mai fafo. Kae ko na hihitemi e he otometi e faigofo, vave te faiga ma taugofo ka fakahetomu.
2. Fakatatia he peleni mo te atiakega o na iloa o te kaufaiagaluega e feagai ma te malohiaga ki o latou iloa kua iei, na koleniga kua fai ihe taimi kua teka ke iloa tonu ai na koleniga e manakomia ke talafaeagai ma te galuega. Talohaga ki na fakalapopotoga i fafo mo ni koleniga e talafaeagai kae maihe ai ki ni tupe ke kave ia tagata faigaluega ke fakakoleni.
3. Galulue fakatahi ma ie tahi fakalapopotoga i te Pasefika ki te atiakega o na iloa e talafaeagai mo te lumanaki o te kaufaiagaluega o te malohiaga a Tokelau.
4. Galulue fakatahi ma ie tahi motu o te Pasefika ma Niu Hila ke kave te kaufaiagaluega ke faigaluega fakatahi ma ietahi tagata faigaluega i na hihitemi malohiaga i Tuvalu, Niue ma Mataeke o Galuega a Fiti mo ni koleniga i Iuga o te galuega.
5. Falite he polokalame mo he tino fakapitua mai he tahi hihitemi paao i he tahi motu ke ahiahi mai ki Tokelau ke fai ni koleniga i Iuga o te galuega, iioilo na fakaleleiga ma na taki fakagalue ma fautua ki te toe fakalelei atili o te hihitemi.

Taki mo te Fakatinoga:

Ke nofo mau he tino fakapitua mo teni malohiaga e faigata mo te agai ki mua. E tuha pe kua lelei katoatoa te koleniga o te kaufaiagaluega i Iuga o Fenua, e tatau lava ke iei he tino hukehuke pe hiaki foki mai fafo, ke hiakia ma hukehuke na itu tau tekini-kolo ma te hihitemi pulipule mo te fakaglie o te malohiaga. Ka fai e malaga ho mai teni tino fakapitua ki Tokelau mo ienei hiakiga, ka mafai ai ke puipui ni fakafitauili ma lelei ai foki te fakagalue o te malohiaga ma fakamautinoa ko na koleniga o na iloa ma na mafai e talafaeagai.

Eiei na fakalapopotoga na kamata e ki latou ni koleniga tau malohiaga-faka-te-natula i te kamata o te 2003 mae e tatau lava ia Tokelau ke tagaki ki ho he koleniga tau malohiaga ie nei e fatu mo na motu o te Pasefika. He mea tatau lele foki kafai e kave he tino faigaluega ki fafo ke faigaluega fakatahi ma ki latou kua lava na iloa ma na potomahani i na malohiaga mo he mahina pe he 6 mahina ona e lahi na iloa ma na potomahani e manakomia.

Ko he mea mahani ke aofia na koleniga o te kau faigaluega i te taimi e fakapipiki ai he hihitemi fou, ona e mahani tukupu, ka hakili he tino ke hui te tino na koleni kua heai he avanoa mo ni koleniga pe heai foki he tupe ke kave teni tino fou mo ni koleniga. Ke iku manuia he polokalame i te lumanaki, e tatau ai lava na koleniga ke fakauau ma fakatatia pea o ni tupe mo ni koleniga.

Ko he tahi vaega taua ke he lahi ai te fakamoemoe ki fafo, ko te fakaaoga o na hihitemi e faigofie, ona e faigata ke taofi i Tokelau ki latou kua koleni ma lava te latou iloa mo te kivilaga ma te fakatinoga o na fakalaleiga. Eiei ni lagona o ki latou e fatua na ata ke fakaaoga na hihitemi otometi, ona ko te lelei mae e talafegagai lava ma na atunuku i fafo. Ko ienei lagona e tatau ke teteke kae talia lava na hihitemi e faigofie i taimi uma. Ko na hihitemi e lahi na itu tau tekimikolo e he talafegagai ki Tokelau ona e: 1) e fakapokepoke i te vevela ma te ahihigalu, heiloga kei loto o he fale e mafai ke pulea tona hikomaga ma he ono lahi ai ni fakafitau; 2) e he mafai ke nofo mataloa ia tagata eiei o latou iloa fakapitoa i te tauhiga ma te fakalaleiga o ienei hihitemi, tona uiga ka fakamoemoe ki fafo mae ko teni faiga e tauhiga ma fano ai te taimi.

Fakamaoniga. Ko te taigole o te aofaki o tagata Tokelau ma na avanoa ki na koleniga fakapitoa ma na aoga, e faigata ai ia Tokelau ke tu kehe mai na fautuaga ma na hapoti mai fafo. Kae mafai he tagata faigaluega i Iuga o Fenua e agavaka ke feagai ma na fakafitau o te atiakega o te malohiaga, fatuga o ni aiaiga mo te fakatinoga o na fautuaga mai fafo, iloliga o na fautuaga mai fafo ma fai ma hokotaga i te va o Tokelau ma tagata fautua mai fafo. E taua te fakauau ni koleniga ma ni taumafataga tau akoakoga mo te agai ki mua ma malamalama ki na hikili e talafegagai mo tagata faigaluega i Iuga o Fenua.

fakapitoa mai fafo.

(Fakatinoga e te Malo) Fakataigole lagolago ki na fautuaga ma na poto

Pohi mo te Atiakega o na Mafai tau Malohiaga Faka Loto-i-Fale

2. Fakamaoutino ko na peleni tau atiakega ke i loto ai na huiga o te tau, ma na afainaga o te hikomaga, mae ke fai he iloliga mo te afainaga o te hikomaga i te taimi e fatufatu ai na polokalame lalahi.
3. I na fakatinoga ke atiake ai na malohiaga-faka-te-natula ma na malohiaga lelei, e tatau ke haofia e Tokelau te iloa fakaaoga lelei o te malohiaga ke nahe lahi he afainaga ki te hikomaga, mae ke fai ia ma fakatakitakiga ki na fenua iela koi haga fai lava na faiga fakamatatakutaku kua mafua ai na huiga o te tau ma te heleka o te levolo o te tai ki Iuga.
4. E tatau na koga e teu ai na huanu ke talafegagai ma na taki a Niu Hila mo te haogalemua ma te fakataigole o na afainaga ki te hikomaga.

1. Lagolago ma auai malohi ki na fonotaga ki na huiiga o te tau ma te hikomaga.

Taki mo te Fakatinoga:

Fakamaoniga. E manino lele pe kohe a lava na faiga a Tokelau e fai mo te fakataigolega o te kaha e afaina ai te Fale-meamata, e he lahi he huiiga e pa ki ei. Kae ona ko te afaina o Tokelau mai ie nei fakapopolega, e taua ai ke olo ni hui mo Tokelau ki na fonotaga ki te huiiga o te tau kua iei, ke fakali manino ki ei tenei fakapopolega o mae tatau ai foki ia Tokelau ke fatu tana malohiaga i na faiga e he lahi ai te afainaga o te Fale-meamata ke atili fakamaanaki ai ana fakatu e ie tahi fenua.

(Fakaitino e te Malo ma te Taupulega) Hapoti na gaoiiga a te lalolagi ki te fakataigolega o te kaha e ono matua o na hui ai te tau ma fakamauninoa ko na tautuaga tau malohiaga e he lahi tana fakakino ki te hikomaga.

Polihio o te Hikomaga ma te Malohiaga

1. Ke fakalava ma totoe te huan e teu i na fale afi mae ke toe fakatumu pea i malaga uma ma na malaga huan.
2. Fakatatia he hihitemi fakamau mo na huan e fakaaoga ke kitea ai te huan e manakomia mo he taimi i mua ma fakatatia he teuga huan e lava ma totoe mo he lua pe tolu mahia. Ke fakaaoga na taki a Niuhiia ma ni tautuaga mai fafo mo te teuga o te huan, ke fatu ma fakatu ai he polokalame mo te teuga o na huan i Iuga o na motu e tolu, e haogalemumu ma lelei. Fakatatia he faiga ke toe utu ai ie nei tane huan taki lua vaiaho.
3. Ke fakamuamua na tautuaga taua e manakomia te penihini ma fakaaoga he peleni fakaho lelei, pe ka pa ki he tulaga e fakahetonu ai te penihini.
4. Fakatatia ma fakamalohia na taki e talafatagai mo te haogalemumu o te felakukakiga o te huan ki na taki a Niuhiia.
5. Ke fakamaunau na felakukakiga ma te teuga o na huan ma fakamauninoa e muhimuli ki na taki ma koleni ia tagata faigaluega i Tokelau mo te fakatinoga o na fakaleleiga.

Taki mo te Fakatinoga:

pe he toe talia te huan e te OPEC, ka afaina lahi lele ai ia Tokelau, ona ko te tulaga e tu ai, mae e ono mataloa he taimi e toe maua mai ai he huan. E taua ai ke lava ma haogalemumu te huan e teu ke fakamau ai te maua pea o te malohiaga. E tatau ai foki ke lahi he huan e teu i na fale afi takitahi. E tatau ke lava te penihini ma te huan palu aua na vaka afi mae ke fatu he hihitemi fakamaunau ma kikila ki na manakoga mo te Iumanaki ke faigoftie ai ke iloa te aofaki o te huan e ota. Ka vehca e tau fakahetonu te huan i Tokelau, ke fakamuamua lava na tautuaga tatau ki na huan ma fakatatia he peleni mo te fakahoahoaga.

E lahi he fakapopolega e ono fakahetonu te kaumaiiga o te huanu i te taimi nei kafai na tau e he lelei, pe fakahetonu te vaka. Kafai foki e fai he taua i te Kogatoronu o Sasae,

Ko te fakafitau i o te vai ma te kelekele e fakakino ho ai te huanu i te koga e teu ai mae e he lahi he kikiiaga ki na fakapopolega o te hikomaga mo te teuga pe ko te felakuakiga o na huanu. Ko ie tahi taimi e fakapokepoke te lakuga ma te teuga o na huanu kae mae ai kafai e lahi he aofakiga e teu latalata ki na fale. Ka lahi ai ni fale e ono afaina katoa pe ko ni tino foki e maliliu pe kafai e tupu he mu ki te koga teu huanu i Fakaofo. Ka lelei te koga teu huanu, ka lelei ai foki na afi ma he lahi ai na fakaleleiga e manakomia. E lahi te afainaga o na vaka i moana e mafua mai na huanu kelekele ma vaia ona ko te he lelei o te koga e teu ai.

Fakamaoniga. Ko te hihitemi eiei nei mo te felakuakiga, teuga ma te tufatufaga o te huanu, na fatu i na taimi nae he lahi ai te huanu nae fakaaoga i Tokelau ilo nei. Kua lahi nei te huanu e manakomia e Tokelau, ma kua lahi ai foki o na popolega mo te haogalemua ma te hikomaga. E tatau ai loa ke kikiila totoa ke fakalelele atili na koga e teu ai te huanu mae ke talafecagai ma na taki a te lalolagi mo te felakuakiga o na huanu.

(Fakatiino e te Malo ma te Taupulega) Ke lelei te hapalaiga ma te teuga o te huanu ma fakatumau te lelei ke fakamama ai na fakafitau tau oge.

Pohihi tau Huanu

1. Fai ni polokalame ke fakailoa ki tagata e mafai na afi vaka ke he lahi tana huanu e fakaaoga ka fai e he fakakatoa na afi pe ka fakaaoga. Ka fai e fakapaku te gaholo o te afi i he 10%, hove ka paku ai foki tana huanu e fakaaoga i he 25%, mae e taugofie foki ka fakapooopo he minute pe he lua minute ki he malaga.
2. Ke fatu he tapula o te aofaki o te huanu e mafai ke totogi i te tau mahani ma he tau taugata mo na huanu e ova atu i te aofaki e fakahoia e tuha lava pe lava te huanu e teu.
3. Ke fatu he polokalame fakamau mo na vaka lalahi ke fakateki ai te vaega pulupele ki te agai ki Iuga ma te huanu e fakaaoga ma te huanu e he lelei te fakaaoga.
4. Ke fai ni tukuga paopao i na la, ke tokalahi ai ki latou e iloa fakaaoga na paopao ma na la mae ke taofia ai pea te aganuku mo te fakatiinoga o na faiva ilo te fakaaoga o na vaka afi ma te fano ai o te huanu.

Taki mo na Fakatiinoga:

Ona ko te lahiga o te huanu e fakaaoga e na vaka i te va o na motu e tolu, ko na tupe foki e fakaaoga lelei mo te tauhiga o na afi.

takua i na tahi vaega o teni pepa pohihi, ke fakalahi te huanu e teu ke fakatataigole ai na taimi oge, kae e ono fakamaunau, ona ka iloa ai e tagata e lahi te huanu e teu. E manaita pea ka fakaaoga te taki 40lita i te mahina, kae kafai e manakomia he tahi fakapooopoga, ke totogi ihe tau manuiluga pe fakalauina te tau o na huanu e ova atu o te 40lita, ma tumau pea te tau o te 40lita i te tau hako.

Polihī Malohiā Tūtōkātāhī

(Fakatinō e te Malo ma te Taunulega) Galue agā! kī te he toe fakaaoga o he huanu, ma atīake te malohiāga faka-te-natula mahē fakamoemōega ke 100% pahene malohiāga faka-te-natula.

Fakamaomōiga. Ko te tulaga fakapōkepōke o Tokelau kī na tau ma te hapalāiga o te huanu ma te taua o hona manatu, pehe leo e uiga kī te fale lanu meamata, e talafēagāi ma tatua ai ke hīlu tana malohiāga kī te malohiāga-faka-te-natula. Ko te hitepu kamata ia a Tokelau kī ana moemōitiga ko te fakatākitākitiga o he hihitēmi 10 kwp malohiāga-faka-te-natula i Fakaoto. E heai he fakatitāuli o tenēi hihitēmi taigole kī te hihitēmi paoa, kae e lahi ai te tihō e sefe mai mae ka mau ai foki ni tahi iloa taua mo tagata faigaluega i te fakagalue ma te fakalēleiga o he hihitēmi sola. E manakomia ni tauhaga ke fakamahani i te fakagalue ma na fakalēleiga o tenēi hihitēmi, ke lava ma totoe ai na iloa ma na poto mahani ke mafai ai ke kīkīla lava e Tokelau te nei hihitēmi. E teoloo ka fakalahilahi malie i he 15 – 20 tauhaga ke mafai ai ke 70% te uila e maua mai te sola mo na manakoga o Tokelau.

Ke maua katoa te 100% malohiāga-faka-te-natula, e tatua ai ke hui te tihō. Ko te huanu popo e mafai ke fakaaoga ona e he lahi ni huiga e fai kī na ahi. Kafai ko te sola e fakalahi, e tatua ai ke fau te huanu popo ke hui ai te tihō mo na femalagākiga ma te fauga o te uila e he mafai ke maua katoa mai te sola.

Taki mo te Fakatinoga.

1. I te taimi e fakapipiki ai te hihitēmi sola i Fakaoto, ke fatu ma lafo he pepa kī ni fakalapopotōga mo ni fakatupēga ke fakalahi ai te hihitēmi kī te 30kw ma ni hihitēmi 10 – 15kw i na tahi motu. Ka maea ma fakaaoga i te nei hihitēmi, oi fatu ai he toe pepa mo te fakalahiāga o te hihitēmi i Fakaoto kī te 70% o te uila e manakomia ma ie tahi motu ke fakalahi ke 50 – 70% uila e mafai ke maua.

2. Fakatagi mo ni fakatupēga ke fai ai ni hūkehūkega mo te fakaaoga o te huanu popo ke hui ai te huanu tihō. Ko tenēi hūkehūkega ke fatu tūtuha ma na hūkehūkega a te hihitēmi paoa a Samoa i te 2004, na polokalamē hūkehūke a te Malohiāga-Faka-Te-Natula ma te Fakaaoga lelei o te Malohiāga a te Falelūpe Atiāke o Asia i te 2005, ma ie tahi fakatākitākitiga o na huanu popo i Niukalētōnia, Polinēsia Falani, Vanuatu ma Fiti. E tatua ke kīkīla totoka kī na fenua e ono afaina ma te he tokalahi o na kaufaialuega i Tokelau, ma te afainaga o na kaufaialuega ka fai e tokalahi he vaega e lakua mata o te popo.

Polihī o te Fakaaoga lelei o te Malohiāga mo na Femalagākiga

(Fakatinō e te Malo ma te Taunulega) Ke lelei te fakaaoga o na huanu mo na vaka ahi, ma na vaka laku uta/pahehe.

Fakamaomōiga. Ko Tokelau kua hīli atu te taugata o te lakuga o tana huanu i te lalolagi. E he tulaga manuia ai ka fai e fakamaunau, mae e taua lele mo te fakaaoga kī na vaka ma na femalagākiga. I te taimi nei ko Fakaoto e fakaaoga lahi ai na vaka ahi, kona penihini e fakahoaho taki 40lita i te mahina ona e he lahi te penihini e teu. E veia ona

Taki mo te Fakatinoga. E tatau na kamupani mai fafo, te malo ma loto o fenua ke tuku mai na peleni mo na fale lalahi ma na polokalamae atiake ki te Mataeke o te Malohiaga i te taimi e fatufatu ai a latou peleni ke onono ai te malohiaga e fakaaoga. Ka lava ai foki he taimi e faitē lelei ai te malohiaga e fakaaoga ka ko heki fakamautu na peleni. Ko na polokalamae lalahi, ke kikiia ki na onononga ma na tau o te malohiaga e fakaaoga, ma tatau ki latou e fatua na polokalamae ke fakamatea mai te malohiaga e ono fakaaoga ma na auala e mafai ai ke hiaki tautahi ai.

Fakamaoniga. Ona ko te hihitemi fau uila e taigole, ko he polokalamae taigole kae lahi tana uila e fakaaoga, e mafai ke fakahetonu ai te hihitemi. Eiei ni fale lalahi kae maihe lava te malo i na tahi motu o te Pasefika na fau, na lahi ai na lihohi na fano ona ko te lalahi o na pili e mafua mai i te fakaaoga na ata, e he talafegaai ma te hikomaga. Ko na polokalamae uma e tatau ke hiaki e he tino e ia mafata kikiia ki te malohiaga e manakomia e te polokalamae ma kikiia: a) pe mata e fakahetonu te hihitemi paoa i temei polokalamae, e) pe iei ni huiaga tatau ki te polokalamae ke fakataigole ai tana uila e fakaaoga mae ke he afaina te aoga o te fale. E he tatau ai ke iei he malohiaga mo te Minihita o te Malohiaga ke taofia he polokalamae e fakatatau lava mo te fakaaoga o te malohiaga mae tatau lava ke iei ni onononga o te mataloa o te fakaaoga o te malohiaga e te Mataeke o te Malohiaga ma fautua ia tagata ki na tau e ono iei te malohiaga ma na tau taugofie ka fai he mea tatau. E taua lahi ke onono lelei na malohiaga e fakaaoga ka fia fakatau he vaka lahi, ona e lahi na kehekehega i na malohiaga e fakaaoga e na vaka, e ve ko na vaka nae fakaaoga mo na itu tau taua e kai penihini ma taugata te penihini e fakaaoga.

(Fakatio e te Malo) Ke onono fakalelei uma na fale ma na atiakega Fou i te taimi e fatufatu ai, mo te uila e ono fakaaoga ke mauinoa e talafegaai ma he afaina ai te hihitemi.

1. E tatau te Mataeke o te Malohiaga ke fatu ni auala taki mo na ea malulu e he kai uila ma ni taki mo te fakapipikiga. Kafai e fakataga ni ea malulu e te Taupulega, ke fakaaoga na mahini e vaelua kae he ko na machine tahiti e fakapipiki ki na famalama. Eiei he matau ko na ea malulu e vaelua e taugata mae e tau talafegaai ia ki te hikomaga o Tokelau ma taugofie ona fakaleleiga ma fakataigole ai foki te afainaga o te hikomaga ka fai e kikiino.
2. Tatau lava ke fakatata ni auala tuhiuhi ke fakamaonia ai te fakapipikiga o na ea malulu. E fakataga mai lava e na Taupulega he ea malulu e fia fakapipiki. Ke fakapipiki lava ki na auala taki na fakatata e te Mataeke o te Malohiaga ma hiaki e te Mataeke o te Malohiaga pe na mulimuli ki na auala taki.

Taki mo na Fakatinoga:

talafegaai ma te hikomaga o Tokelau ma e lahi na tau mo na fakaleleiga kae maihe ai te toe hui ma te fakakino o te hikomaga ka fai na ea malulu kikiino e tiaki.

Fakamaaonia. Ko he fakafititauhi lahi i na hihitemi paoo taigole i na motu o te Pasefika, ko te lahi o na hihitemi ea malulu e fakaaoga. Nae fakapipiki lava mo te fakaleleiga o te koga galue o na kaufaigaluega a te malo mae e fakamaonia ona ko na mahini komiputa ma ie taahi mahini a na ofiha nae fai ke fakaaoga i lotu o he hikomaga puihua. Eie ni fakamaonia e he lahi he kehekehega o na fakaleleiga ki na mahini komiputa e fakaaoga i na koga e heie ai ni ea malulu ma na koga e fakaca malu. Ko he taahi fakafititauhi ko te kinokinogofie mahini ea malu ona e he

(Fakaino e na Taupulega) Ko na ea malulu ko he fakafititauhi lahi ki te hapalaga o te malohiaga mae ke fakaaoga lava ka uma ona onoona fakalele ma fakataga mai e te Taupulega.

7 *Komipiuta taigole tana uila e fakaaoga.* Ke fakatau na mahini komipiuta e palafa na puha ma taigole tana uila e fakaaoga ilo na taahi itukaiaga. Ko na mahini e palafa na puha e tau fetahi ma te hikomaga o Tokelau mae toe maua o latou tau i lotu o he 2 ki te 3 tauhaga. E tatau foki na mahini ke pe lava ia ka fai e he fakaaoga ihe 15 pe 20 minute.

6 Ka fakaluanina na pili e ova atu ma te 100kwh i te mahina, ka maua ai te 10% pahene e fakapooopo ki te pili ka fai ko te aofaki o te malohiaga e fakaaoga e 5% pahene e ova ai. Ko ki latou ia e heahae ova e he afaina lahi ve ko ki latou e ova lahi.

5 *Pilitotogi Fakaitia.* E tatau te Mataeke o te Malohiaga ke fautua malohi ki na Taupulega ke fakatitia he faiga pilitotogi ke mafai ai na meatotino kai uila ke lahi te totogi ilo na meatotino e taigole tana uila e fakaaoga. Ko na meatotino e talafaeagai ke fano i te tau pito hili o na taugofie (totogi e fautuaga e 100kwh i te mahina e fakamama na tau) mae ko na iunite ei Iuga atu o te 100kwh ke fano i te tau hako pe fakaluanina foki ke lelei ai te putiputiga o te malohiaga.

4 *Fakalelele atili te fakaaoga o na aihā.* Ko te lahiga o te malohiaga uila e fakaaoga i Tokelau ko na aihā. Ko he fakalelele atili ko te hui o na aihā kai uila ki na aihā e taigole tana uila e fakaaoga. Ke hakihiki mai e te Mataeke o te Malohiaga na aihā e talafaeagai ke fakatau ihe tau taugofie. E tuha pe pakū lele ki lalo te tau, e lahi lava te tupe a te Malo e sete ona ka fakatataigole te tupe e fano mo na tupe fakamama i te agai ki mua, mae ka faigofie ai foki mo na fakaleleleiga ka fokotahi lava te itukaiaga aihā e fakaaoga.

3 *Huiga o na ogamu uila ki na ogamu kaha.* I te taimi nei, e fetaiaki lava e te tino lava ia te utuga ma te kaumaiaga o na fagu kaha mai Samoa. E tatau ai na Taupulega ke fakaaoga te hihitemi a te hitoa mote hapalaga o na kaha ke faigofie ai ki tagata. E taugofie foki ka fai e lahi te aofaki o na kaha e kaumai i he taimi fokotahi pe fai he faiga e ve ko Nue, na fai na fehokotakiga ma he kamupani mai fafo mo te fehuiakiga o na fagu tutumu ki na fagu mamaha. Laku mai na ogamu kaha ke fakatau.

fano i te uila ke fakapipiki ki na fale e fakaaoga ienei meatotino ke iloa ai te uila hako e fakaaoga.

Polihī Fakaaoga Lelei o te Malohiāga tau Uila

(Fakatinō e te Taupulega) Tatau ke fakamīta uma na hoko ma fua te totogi ki te mīta.

Fakamaaoniga. E he mafai ke fakatāigole na malohiāga e maunau ka fai ko ki latou e fakaaoga te malohiāga e he latou iloa te aofaki e fakaaoga, ko te ia, e tatau ai ke fakamīta uma na hoko. E tuha pe hako ko na ofisa o te malo ma te Taupulega e totogi lava a latou pihī, kae tatau lava ke latou iloa na tau hako mo te hapalaiga o te uila ki na fale ie nei.

Ko te polihī ke fakamīta te uila e fakaaoga, ka atihī manino ai te malohiāga e fakaaoga mo na peleniga o te malohiāga. E iloa lava te aofaki hako o te malohiāga e fakaaoga ka fai e fakamīta. Ko he tahi vaega e manino ai ko na tau o na malohiāga maunau ki na kakai e agai ki Iuga kafai e he latou iloa te aofaki hako o te uila e latou fakaaoga.

Taki mo te Fakatinoga. E tatau ke hapalai e te Mataeke o te Malohiāga na mīta ma fehohaonani ki te fakapipikiga. E tatau na Taupulega ke fakamaunino ko na mīta e faitau ma pihī ki latou e fakaaoga mo te aofaki hako o te uila e fakaaoga.

(Fakatinō e te Malo ma te Taupulega) Ke fakatohina ia tagata ke fakaaoga na moli ma na meatotino e he lahi tana uila e fakaaoga.

Fakamaaoniga. Ko te tonu ke fakamama na tau o te malohiāga, kua fai ma fakatitau e maunau ai o te malohiāga ona e kitea e tagata e maualalo na tau ilo na tau e tatau ke iei ai. Hove e maua te \$1.00 e totogi e te malo mo na iunite uila e fakaaoga i Tokelau, tona uiga kua hili atu ona fakaluaina te aofaki e totogi e te malo ilo tagata tautokatahi. Kua tatau ai te malo ke kikitā ki na faiga ke fakaaoga lelei ai te malohiāga, pe totogi foki lava he vaega o na meatotino a tagata, mo te agai ki mua, ke he lahi na tau ki te malo ka fakaaoga pea na meatotino e taigole tana uila e fakaaoga.

E lahi lele te uila e maunau i Tokelau, ona ko te kai uila o na moli e fakaaoga ma na aiha e fakaaoga e lalahi atihī, lahi e fakamaunau tunu ai na meakai, ma te fakaaoga o na kōmpūita kai uila e fakaaoga holokatoa i na taimi faigaluega.

Taki mo te Fakatinoga:

- 1 *Fakalelei atihī ona moli e fakaaoga.* E tatau te Malo ke fakatatau mai na moli e taigole tana uila e fakaaoga, oi fakatatau ai ki tagata i he tau paku (vena ma te fakapipikiga) ke hui ai na moli kai uila e fakaaoga. E tuha pe kave fua ie nei moli, e lahi lava te tupe marna a te Malo e sefe mai i te agai ki mua, mae ka fehohaonani foki ki te hihitemi fau uila i te he lahi te uila ka fakamaunau. Ke matau mai e taua lele na hitoa ke teu fakalahi na hipē matauila.

- 2 *Fakaaoga lelei o te malohiāga mo na kuka.* E taua ke taofia te laku mai o na ogaumū uila. Fakatohina ia tagata ke he fakaaoga na meatotino e lahi tana uila e fakaaoga, ma fakamaina ki ei na afainaga o te hihitemi paoa e ono pa ki ei. Ka faigata te taofia o ie nei meatotino, kua tatau ai te Taupulega ke heiti he tau maualuga mo ie nei meatotino ka fakaaoga. E tatau ke fai he mīta e te Mataeke o te Malohiāga mo na ogaumū e

i Tokelau ona e taugata ka toe hui he totooga kua fakahetonu. E mahani lava ona fatigata ke fakamaonia ko te fakahetonu o he totooga na mafua mai lava i te fale na ia faua ilo te tino na ia fakaaoga, mae ka fai e fakamaunia he tagi, e lahi na tau ka fanau mai ai mo te huiga o he totooga. E tatau ai ke nahe fua te filiifiliga o na totooga ki o latou pepa fakamaonia (warranty) mai na fale e fau e ki latou ka fai he totooga e fakahetonu.

Taki mo te Fakatinoga. Ka fai eiei he mafaufauga ke toe fakalahi pe toe teuten te hihitemi paoga, e tatau ai lava te vaega e fakakonkalkate mo te fakatinoga o ie nei mafaufauga ke onono te fakaaoga o na malohiiga faka-te-natula mae ke fakaaoga lava na meatotino kua fakamautinoa ma fakamoemoegia e lelei i te Pasetika.

(Fakatio e na Taupulega) Kikila lelei te momoliga, fakahoga, ma te maua pea o te uila.

Fakamaoniga. Ko na kilouati itula (kwh) uma e maua, eiei lava he vaega taigole e maua. E he mafai ke fakahaei katoa ienei maua kae mafai oioi ke fakataigole. Eiei lava na tau ka fakalelei atili i te momoliga o te malohiiga mae e agai ki luga ka fai e faka opoopo pea ie nei fakaleleiga mae eiei lava te levolo o teni maua e taugofie. E mafai ke fai ma hini a te Malo ke fua te levolo o te fauga o te malohiiga uila, momoliga ma te fakahoga e taugofie ma taumafai ke pa ki teni levolo. Ko te hitepu muamua mo te fakalelei atili o na tau o te hihitemi uila, ke lelei na fakamaunanga o te fakagalue. Ka maua na fakamatataga e fia maua mai na fakamaunanga mo te onononga o te fakagalue o te hihitemi, oi kua mafai ai ke fatu na fakatutu mo na fakaleleiga. Ko na hikili e tatau ke iei mo te onononga o na fakamatataga fakagalue ma te fatuga o na fakatu pito hili ona lelei mo te fakaleleiga atili, e he ono maua i Tokelau. E manakomia ai he polokalamae faufautua mai fafo ke fatu ma fakatata he takiala mo na fakamaunanga, fatu ni faiga ke tumau ai te lelei o te hihitemi uila ke mafai ke fakaaoga fakaaunu e te kauftaigaluega fai peleni a Tokelau ma na Taupulega.

Taki mo te Fakatinoga, Levolo o te Malo. Fatu he polokalamae faufautua mai fafo ke fakatu he hini mo te fakagalue lelei, fakatata ni auala mo na fakamaunanga o na maunau mae ke fakatino loa ki te fauga o te uila. Ka lahi na maunau ina hini, ke fatu he polokalamae fakalelei atili te hihitemi fakataigole maunau ke talafegagai ma na hini.

Taki mo te Fakatinoga, Levolo o te Taupulega. Fakatino na taki mo na fakamaunanga fakagalue o te hihitemi paoga ei loto ai na kilouati (kWh) e maua taki itula, kilouati (kwh) taki lua vaiaho, ma na huanu e fakaaoga i te itula.

Ke fehohoani foki te Mataeke o te Malohiiga ma kavekehe na paoga e he fakamita ke fakataigole ai na maunau. Galue ki na taki kua fakatata mo te fauhia lelei o te paoga mae ka he faia ienei taki, galuue ma te Mataeke o te Malohiiga ke fatu ni auala ma fakapipiki na meatotino tatau e talafegagai ma na taki.

POLIHU TAU MALOHIAGA MA O LATOU TAKI FAKATINO

Peleniga Malohiaga ma na Aiaiga Polihi

(Fakatino e te Malo) Ke fatu ma tauhi he ata e talafetagai mo te peleniga ma te atiakega o te malohiaga, ke mafai ke fatu ma fakamalohia na taki o te haogalemu ma te puipuga o te hikomaga, fatu ma fakamalohia te lautuha o na auala mo te fakagalua ma na fakalelei o te hihitemi malohiaga e hako, ma fautua te Malo ma na Taipulega ki na vaega mo te fakaaoga lelei o te malohiaga, atiakega o na lihohi tau malohiaga ma te fakatatia o he hihitemi pili totogi mo te hapalaga o te malohiaga.

Fakamaoniga. Ona e matau ko na motu ei tana kikilaga lava te kavega o na tauuaga o malohiaga fua ki manakoga o tagata, e matau foki e he tatau ke lei he mafautau veia e maua katoatoa na hikili ma te poto mahani e manakomia mo te atiakega ma te fakagalua o te hihitemi hapalai malohiaga fou. E lahi na fakapopolega ki te maliliu ma te laveva o tagata ma te fakakino o te hikomaga, ona ko te he hako o te fakapipikiga ma te fakagalua o te gaohiga o te malohiaga ma e ka taugata ai te fakagalua ka fai e he mulimuli ki na auala fakagalua ma te fakaleleiga kua fakamauninoa e lelei. E manino lele foki, ko na fakahoia o na hihitemi malohiaga i na motu e manakomia ni fehohoaniga mai fatu mo te atiakega o te fakaaoga lelei o te malohiaga, fatuga o he hihitemi pilitotogi talafetagai ma he hihitemi pullepule lelei.

Polihi Paoa Uila

(Fakatino e te Malo) Hapoti na tekiniholoti ma na hihitemi tau uila kua talamauninoa e talafetagai ki te hikomaga, taugofie ma talafetagai ma na nofonofoga, ilo na polokalame atiake tau malohiaga e he mauninoa pe lelei ma faigata, ma fakaaoga foki e latou na meatotino e he mauninoa pe lelei mo he lima tauhaga ini ie tahi polokalame venei i na tahi motu o te Pasetika.

Fakamaoniga. E lahi na motu i te Pasetika na fetagai ma ni fautuaga ke fakaaoga ni meatotino mo te hihitemi malohiaga kae meake, ko na meatotino nae he fetau ma te hikomaga o te Pasetika. E hako ai lava ki na meatotino tau malohiaga-faka-te-natula ma e kitea foki ki na hapalai o ie tahi hihitemi malohiaga. Ka kikilia ki te auala gata, taigole o na tino eiei ni hikili i na hihitemi malohiaga, ma te taugata o na fakaleleiga ma te tauhaga o na totooga, e taua ai ia Tokelau ke fakataga oiote na meatotino kua fakamauninoa e mataloa te fakaaoga i na tahi motu o te Pasetika e tau tutuha ma Tokelau. Ko te lahiga o taimi, ko na meatotino e he fetau mate tulaga o na motu o te Pasetika, e au lava ki te 3 pe 5 tauhaga kua kikino. E taua ai te Malo ke fakataga oiote ke fakapipiki na totooga malohiaga kua fakamauninoa e ova atu i te 5 tauhaga te lelei. Ko na pepa fakamaoniga o na totooga a na fale e hapalai mai e ki latou, e he aoga lahi

tona fakakino ki te hikomaga.	
(Fakatino e te Malo) Fakataigoloe te Iagolago ki na fautuaga ma na poto fakapitoa mai fafo.	Atiakega o na mafai ma na iloa tau malohiaga i Iuga o Fenua

KOTOKOTOGA O NA POLIHI

Kikilaga a na Polihi	Fakamatalaga Pukupuku ki na Polihi
Peleni Malohiaga ma na Aiaiga Polihi	(<i>Fakaitino e te Malo</i>) Ke fatu ma tauhi he ata e talafeagai mo te peleniga ma te atikakega o te malohiaga, ke mafai ke fatu ma fakamalohia na taki o te haogalemua ma te puipuiaga o te hikomaga, fatu ma fakamalohia te laututuha o na auala mo te fakagalue ma na fakalelei o te hihitemi malohiaga e hako, ma fautua te Malo ma na Taipulega ki na vaega mo te fakaaoga lelei o te malohiaga, atikakega o na lihohi tau malohiaga ma te fakatatiaga o he hihitemi pili totogi mo te hapalaiga o te malohiaga.
Paoa Uila	(<i>Fakaitino e te Malo</i>). Hapoti na tekimikoloti ma na hihitemi tau uila kua fakamautinoa e talafeagai ki te hikomaga, tauagofie ma talafeagai ilo na polokalame atikake tau malohiaga e he mautinoa ma faigata ma fakaaoga foki e latou na meatotino e he mautinoa pe lelei mo he lima tauhaga ini ie tahi polokalame venei ini ie tahi motu o te Pasetika. (<i>Fakaitino e na Taipulega</i>) Kikila lelei te momoiga, fakahoaga, ma te maua pea o te uila
Fakaaoga lelei o te uila	(<i>Fakaitino e te Malo</i>) Ke fakatohina ia tagata ke fakaaoga na moli ma na meatotino e he lahi tana uila e fakaaoga. (Fakaitino e na Taipulega) Ko na ea maluu ko he fakafitauhi lahi ki te hapalaiga o te malohiaga mae, ke fakaaoga lava ka uma te onono fakalelei, ma fakataga mai e te Taipulega. (Fakaitino e te Malo) Ke onono fakalelei uma na fale ma na atikakega fou i te taimi e fatufatu ai mo tana uila e ono fakaaoga ke mautinoa e talafeagai ma he afaina ai te hihitemi.
Polihi Malohiaga Tutokatahi	(Fakaitino e te Malo ma te Taipulega) Galue agai ke he toe fakaaoga o he huau, ma atikake te malohiaga fakate-natula mahe fakamoemoeega ke 100% pahene malohioaga fakate-natula.
Polihi mo te Fakaaoga lelei o te Malohiaga mo na Femalagakiiga	(Fakaitino e te Malo ma te Taipulega) Ke lelei te hapalaiga ma te teuga o te huau, ma fakatumau tona lelei ma fakatatiaga na fakapoplega ki te oge.
Huan	(Fakaitino e te Malo ma te Taipulega) Hapoti na gaioioiga a te lalolagi ki te fakatatiaga o te kaha e ono mafua ona hui ai te tau, ma fakamautinoa ko na tauhaga tau malohiaga e he lahi
Hikomaga	(Fakaitino e te Malo ma te Taipulega) Hapoti na gaioioiga a te lalolagi ki te fakatatiaga o te kaha e ono mafua ona hui ai te tau, ma fakamautinoa ko na tauhaga tau malohiaga e he lahi

Tokelau ma ie tahi fakalapopotoga i fafo. Ko na galuega taua a te malohiaga i te Malo, ko te hapotiga o na Taupulega ite jei o he tino kua lava hona koleniaga, iloa ma te potomahani. Ko na galuega fakapitoa, ko te fautua ki te fatuga o he hihitemi pili totogi, fatuga o na polokalamo te atiakega o te malohiaga, fakatu he ata ke tutuha ai te fakapipikiaga o te hihitemi malohiaga, fakagalue ma na fakaleleiga. Ko ie tahi galuega ko te fatuga o na polokalamo te atiakega o na iloa o tagata faigaluega o te hihitemi paoga, ononga o na afaimaga o te hikomaga o te hihitemi malohiaga, onono te fakagalue o na hihitemi i luga o na motu, fautua mo te fakalelele atili o na fakatinoga, ma fai ma hokotaga i te va o Tokelau ma ie tahi fakalapopotoga i fafo.

Galuega a na Polihii i te Levolo a te Malo

- Taupulega.
5. Ko na fakatulave e tatau ke talafaeagai ma te agaanuku, poloitiki ma te tulaga i Tokelau. E he mafai ke fakatino ma he aoga ka fai ko ienei polihii ma na taki e he talafaeagai ma te tulaga i Tokelau. E taua ai ki te hini o te fatuga o na polihii ke fatu ki he ata e mafai na fakatinoga taua ke fakatino i te levolo o na Taupulega.
 4. Fakataigole na fehoahoaaniga tau fakagalue ma te fakaleleleiga mai fafo. E faitau vaiaho pe mahina foki ke maua ienei fehoahoaaniga mae ka fai e he mafai e tagata nukuu fakagalue te hihitemi malohiaga, ka he fakamoemoeaga foki o na tautuaga. E taua ai o te fakapipiki o he hihitemi malohiaga faigofie, mauagofie na totooga ma vave o te faiga o na fakaleleleiga.
 3. Fakataigole te fakakatoga pea o te totogi o te fakaaoga ma te fakaleleleiga o te malohiaga. E tatau ke manino te fakaaoga o te malohiaga e tagata Tokelau ma te mae tatau ke totogi te malohiaga i te tau hako. Ko te fakakatoga o te totogi o te malohiaga, ka taofia mai ai ienei tupe i te fakaaoga mo na akoakoga, ola malolo ma ie tahi tauuaga taua iloa te malohiaga.
 2. Fakataigole te afaimaga o te hikomaga i te atiakega ma te fakaaoga o te malohiaga. Ko te hikomaga o Tokelau e fakapokepoke lele ona e fakakino gofie i na huanu mafuifufu, hona fakaaoga o te laufenua, ma te afaina o te fenua, ea, ma te vai.
 1. Fakataigole te honafakaaoga o na lihohi malohiaga kae ke he afaina ai te olaga gali o tagata Tokelau. Ko Tokelau ko he tahi motu kua hili o na taugata tana malohiaga ona e taigole tana maketi ma auala gata. E tuha lava pe taigole te malohiaga e honafakaaoga, ko he tupe lahi lava tena e maunau.
- Mo he fakapoopoga, ko na hini mo te taimi nei e takua foki i na polihii:
2. Ke maua he ulu taugofie ma lelei katoatoa ki tagata uma.
 1. Ke taunuku te tutokatahi o te malohiaga ite atiakega o na lihohi malohiaga i luga o fenua.

E lua ia hini mo te atiakega o te malohiaga a te malo o Tokelau e taki ai na polihii:

HINI O NA POLIHII

FAKAMATALAGA: ITU TAU POLIHI

Ko na polihi o te malohiā a Tokelau, e tatou lava ke mata e mafatiā o te taigole o te aofaki o tagata, taigole o te laufenua, taigole o na ihohi mo ni atakega tau malohiā, ma te kehe o na nofonofoa a tana malo. Ko na Polihi Malohiā a te Atunuku ma na Auāla Taki o na Peleni Fakatino nae kikiā lava ki na vaega e 7 i nei fakapitoa ki Tokelau:

1. Ko Tokelau ko he fenua e tali tutuā na itu tau polotiki tutokatahi e tolu. Ko te kikiāga muamua a te malo i Tokelau, ko na Taupulega i na motu takitahi. E he lahi te pule a te malo kae lahi lava hapoti i na itu tau tupe, ma te tekimikolo ki na Taupulega kae maihe ai na matakupū ma te va ki fafo.

2. Ko tagata e nonofo fakatahi uma i te koga fokotahi i Iuga o na motu ma tutuā uma te maua e ki latou na tautuaga o te malohiā.

3. Ko na hokotaga o te va o na motu e fua lava ki na malaga a te vaka mae lahi te taimi e fano ka manakomia ni fehoahoainga mai he tahi motu.

4. Ko te hihitemi malohiā e fakamoemoe lava ki na huanu e kaunai mai fafo. Eiei na malohiā sola e fakaaoga e Teletok ma te lala o te USP i Atafu kae ko na malohiā uma ve ko na afi vaka, afi moli, tavale ma na vaka lalahi e fakaaoga lava te huanu.

5. E he lahi ni felakukūiga i Iua o te fenua, e fakaaoga lava ka fai ni uta lalahi e fia laku.

6. Ko te lahiā o na fale o kaiga e fakaaoga na aiha tu, aiha takoto, TV/Video, mahini tanea, ma na vaka afi kua lahi atu ai te malohiā e fakaaoga ka fua ki e tahi fale kaiga i na tahi motu o te Pasefika.

7. Ko te tokalahiā o tagata Tokelau e nonofo i Niuhiā.

Ko te pepa polihi atunuku te nei na fatu i na mafautauga e fa i nei:

1. Ko te pule, fakagalue, ma na fakaleleiga o te hihitemi paoa e tumau lava i na Taupulega takitahi.

2. Ke malilie na Taupulega ke talia ma fakamalohia na vaega o te haogalemū, fakaleleiga ma he hihitemi fakamaumau ke laututūha ai na motu e tolu.

3. Ko na Taupulega ke hefi lava tana pilitotogi i he kikiāga totoka ki na fautuaga mai te Mataeke Malohiā a Tokelau.

4. Ko na polokalame mo te putiputiā o te malohiā e fiifili ma fakatino e na Taupulega takitahi i Iuga lava i tana kikiā totoka ki na fautuaga mai te Mataeke Malohiā a Tokelau.

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13	Polihī o te Fakaoga lelei o te Malohiaga mo na Femalagakiga.....
14	Polihī tau Huan.....
15	Polihī o te Hikomaga ma te Malohiaga.....
16	Polihī mo te Atakega o na Mafai tau Malohiaga faka Loto-i-fale.....

KUPUTOMUA

Ko te malohianga kōhe vaega taua ki te fakataunukuga o na hini e tolu o te atiakega fakaaaupea o te: nofonofoga tutuha, tama-o-kaiiga ma te pupuiga o te hikomaga. Ko he tahi uiga o te kupu malohianga, ko te kautu ia o na fakapopolega o na atiakega fakaaaupea. E araina uma ai na vaega atiake o na nofonofoga ma te tama-o-kaiiga, ei loto ai te olaga, vai, fatoga, aofakiga o tagata, ola malolo, akoga, fatuga o galuuga ma na matakupū tau ki na itukaiga (tamaloa/fatine). E kino ia, ko te gaohiga ma te fakaaoga e araina ai te hikomaga ma na lihohi fakate-natula i te taimi nei i na levolo i loto-i-fale, liko o te pasefika, ma te liko o te lalolagi. Ka fia maua na hini o na atiakega, e taua ai ke kikiila totoka ke toe fuitūfui te hihitemi malohianga fakavae ki te malohianga fakate-natula, pūtipūtī lelei o te malohianga ma na huanu mama, ke matai ai ke talafagai ma na nofonofoga ma te hikomaga.

Ko te vaega o te malohianga i Tokelau, kua feoloolo na fakatulave ma na huiga lalahi kua fakatino i na tauhaga kua teka, mae koi lahi na huiga e peleni ki ei mo te lumanaki. E kitea ai te fakatauaga o te atiakega o te malohianga kae maihe ai te paoa e te Malo o Tokelau i na tauhaga kua teka atu nei. Kae i te taimi nei ko na fakatulave tau malohianga kua tapena ma fakatino ka ko heki iei he ata taki fakate-atunuku. Nae heai he ata taki ke fakatino ai na peleni ma na fakakikuga. E taua ai ke fatu ni auata taki ke taki ai na fakatulave tau malohianga. Aua ka heai ni polihī ma ni auata teuteu, ka faigoŋe ai ie nei fakatulave ke kehēkehē, he mautu, fakapokepoke, he fakaoaloaigia ma kikiila lava mo he taimi pukupuku.

Eiei he talitonuga, ko na Polihī o te Malohianga A te Atunuku ma na Auata Taki o na Peleni Fakatino muamua a Tokelau, ka fehoahoani lahi lele ki te takiga ma te fakatauaga o na fakatulave. Ka maua ai foki ma he ata talafagai ma te Malo o Tokelau ki te takiga o na peleni ma te pulepulega o te vaega tau malohianga. Ka mautinoa ma mautu ai ana taunafaiiga ki na hini ma na fakamoemoe o te Atunuku. Ko na tapenapenaga ma te pukega o ie nei polihī, ka fehoahoani lahi ai ki Tokelau ki te fakamautuuga o te vaega o te malohianga mo te lumanaki. E taua ai foki ienei polihī ke toe teuteu i te fakahavaiiga o na atiakega o te malohianga fakaaunau ke talafagai ma na huiga e tutupu pea i te lalolagi. Ko na huiga o ie nei polihī na fatu lava ki na talanoaga nae fai ma na Taupulega takitahi. E fakamoemoe, ko tenēi ata taki ka aoga ma talafagai mo te lumanaki.

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Minihita o te Malohianga, Malo o Tokelau
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