

PACIFIC ISLANDS GREENHOUSE GAS ABATEMENT THROUGH RENEWABLE ENERGY PROJECT (PIGGAREP)



Working together to renew the Pacific's future
PIGGAREP

The global environment and development goal of PIGGAREP is to reduce the growth rate of Greenhouse Gas emissions from fossil fuel use in Pacific Island Countries. PIGGAREP aims to do this by helping to remove the barriers that prevent the widespread and cost effective use of feasible renewable energy technologies.

WHAT ARE THE BARRIERS TO RENEWABLE ENERGY IN THE PACIFIC?

FISCAL & FINANCIAL – insufficient start funds, lack of confidence among local investors and policies that do not support Renewable Energy development.

INSTITUTIONAL – ineffective coordination and inadequate capacity to address the challenges of climate change, including the design and implementation of Renewable Energy projects.

KNOWLEDGE, AWARENESS AND INFORMATION – lack of knowledge and awareness at all levels on Renewable Energy as well as on climate change and inadequate skills in the area of Renewable Energy applications.

LEGISLATIVE, REGULATORY AND POLICY – Climate Change and Energy legislation and policies are either not in place or ineffective.

MARKET – high cost of delivering Renewable Energy services and lack of private sector involvement in Renewable Energy service delivery.

TECHNICAL – lack of sustainable Renewable Energy-based energy system installations as well as the absence of guidelines on Renewable Energy technical specifications suitable for Pacific Island Countries.

PIGGAREP is delivering a range of activities in 11 Pacific Island Countries – Cook Islands, Fiji, Kiribati, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu – to help remove these barriers and bring about:

1. Increased number of successful commercial Renewable Energy applications;
2. Expanded market for Renewable Energy Technology applications;
3. Enhanced institutional capacity to design, implement and monitor Renewable Energy projects;
4. Availability and accessibility of financing to existing and new Renewable Energy projects;
5. Strengthened legal and regulatory structures in the energy and environmental sectors; and
6. Increased awareness and knowledge on Renewable Energy and Renewable Energy Technologies among key stakeholders.



Boy with a Solar Panel - Lofanga, Tonga.



Coconut plantation for Biofuel and biodiesel.

PIGGAREP in a nutshell:

TOTAL BUDGET

USD5.225million

DURATION

6.5 years (July 2007 to Dec 2014)

DONORS

Global Environment Facility funded, implemented by United Nations Development Programme Samoa, and executed by SPREP.

OUR WORK

A range of feasibility studies are being conducted through PIGGAREP into Renewable Energy Technologies to enable access to additional funding. Assistance with design and development of Renewable Energy systems and models, national awareness programmes, development of Renewable Energy policies and training of personnel in national utility agencies are also part of the PIGGAREP support at the national level. Work is ongoing in each country with some activities highlighted here.

COOK ISLANDS

- Exploring Wind Power biomass and Solar Photovoltaic (PV) Centralised Systems.
- Designing renewable energy projects in the Northern Outer Islands.

FIJI

- Renewable Energy Resource Assessments.
- Net-Metering Policy for Grid-Connected Renewable Energy Generation Systems.

KIRIBATI

- Installation of seven solar water pumping systems in schools.
- Biofuel Feasibility Study.
- Capacity Strengthening of the Kiribati Solar Energy Company (KSEC) to manage photovoltaic installations.

NAURU

- Training for Nauru Utility Renewable Energy staff on the installation and maintenance of solar streetlights.
- A grid-connected Renewable Energy system installed at Nauru College and 150 solar-powered streetlights are now functional.
- Wind Feasibility study completed and wind-power generation found to be feasible for Nauru.

NIUE

- Dynamic Stability Study of the Niue Power Corporation (NPC) Grid to determine the limit for the maximum amount of renewables (Solar PV) that can be integrated into the system.
- Renewable Energy Awareness television programme.

SAMOA

- Wind and hydro monitoring stations.
- Renewable Energy Awareness.
- Grid Connect Solar Photovoltaic system installation.
- Support to Samoa Biodiesel/Biomass development.

SOLOMON ISLANDS

- Feasibility Studies on biofuel and hydropower schemes.
- Institutional and Capacity Building Assistance for the Rural Electrification Unit of the Energy Division.
- Solar Photovoltaic installation and training for rural users.
- Wind Monitoring Tower Procurement and Installation.
- Tina River Hydropower Development Project Awareness Programme.

TONGA

- Community level technical training and awareness on Photovoltaic Technology Applications for solar water pumping and Solar Street lighting.
- Financial Management Training for Renewable Energy Services Company.
- Tonga Solar Home System Technical Inspection and Standardisation.
- National Renewable Energy Survey.
- Aligning Renewable Energy development projects with Environment Impact Assessments Acts.

TUVALU

- Installation of a 40 kW solar PV grid connect system.
- Access to solar PV systems for rural areas.
- Establishment of a Renewable Energy and Energy Efficient Unit in the Tuvalu Electricity Corporation.
- Electricity Tariff Reform Study to inform development of a Net-Metering Policy.

VANUATU

- Technical training on the operation and maintenance of the Sarakata Hydropower Project in Santo.
- Exploring thermal, fossil and biomass options for Talise Mini-hydropower scheme.
- Wind Monitoring Stations at six sites.
- Development of a Wind Atlas.



Children at Port Olry - needing the Power at Port Olry (Vanuatu).

FOR MORE INFORMATION

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SPREP's vision: The Pacific environment – sustaining our livelihoods and natural heritage in harmony with our cultures.



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