Background

The Federated States of Micronesia (FSM) comprises 607 islands grouped in four States (Chuuk, Pohnpei, Yap and Kosrae). FSM has a total population of 103,000 people.

Approximately 86% of FSM’s electricity comes from fossil fuels (primarily diesel). Fuel prices in the outer islands can be twice the price on the main islands. Only 60% of the population has access to electricity, and outer islands sometimes run out of diesel fuel. People in FSM pay some of the world’s highest electricity prices. Renewable energy systems can reduce electricity costs for domestic users and businesses, but requires establishment of policies and loan programs to make it accessible. Solar energy provided only 1% of energy generation in 2012. FSM has set a target of 50% renewable energy by 2023.

FSM is situated northeast of Papua New Guinea, and extends east to west over 2,400 kilometres (km), and north to south over 965 km. The land area is 702 square kilometres (km²) with an exclusive economic zone exceeding 2.59 million km². The islands vary geologically from high and mountainous to low coral atolls, with the majority being low-lying and resource poor. These geographic challenges make it difficult to coordinate large scale responses to sustainable energy. The project will benefit people in all four FSM states.

Project Objective

The project will enhance investments in small-scale Renewable Energy (RE) in FSM through providing legislation to guide the connection of RE systems to the main power grid. The project will also provide small-scale users with access to loans through the FSM Development Bank. The project aligns with the focus on contributing to the national energy policy target for renewable energy and the reduction of fossil fuel use for power generation.

Current situation

FSM’s high dependence on fossil fuels comes at an annual cost of US$50 million.

Increasing the use of grid-connected renewable energy (per kWh) will reduce the financial impacts and the exposure of FSM to fluctuating fuel costs. Electricity prices across the four States of FSM are over US50c per kWh, which make them some of the highest in the world. The high cost of energy puts a strain on household budgets and constrains business activities.

Electricity grids are managed at the State-level. The lower number of users has made it difficult for the utilities and State infrastructure managers to develop the legislation and policies to support the RE industry. Currently, none of the State utilities have policies to allow connection of small scale RE systems...
to the grid, which prevents households and business owners from connecting these cost saving systems. Further there are no financial incentives or low-cost loans that make RE systems accessible for low-income households and businesses that have competing financial requirements that prevent a once-off investment in RE.

**What Is EU-GIZ ACSE Doing?**

The EU-GIZ ACSE programme helps the people of fifteen Pacific island countries address two common challenges: adapting to climate change and reducing their dependence on fossil fuels.

GIZ is supporting the Government of FSM by providing net-metering legislation to allow connection of RE systems to the State utility grids, as well as setting up a low-cost loan program with FSM Development Bank to finance RE systems. The project contains the following components:

**Component 1. Increasing uptake of small-scale grid-connected renewable energy**

This component will be achieved through development of a low-cost loan program with FSM Development Bank which will provide accessible finance to households and businesses to fund RE systems. The project will also work with the College of Micronesia to establish programs to train electricians across the four states in the installation of grid-connected Photovoltaic systems, including net-meters.

**Component 2. Providing the regulatory environment to promote investment in RE systems**

This component will be achieved through the development of net-metering legislation for the four states of FSM, as well as supporting the utilities to introduce connection protocols for small-scale grid-connected RE systems.

**Organisational Context**

The FSM Department of Resources and Development is leading the project, which is implemented by the Pacific Community (SPC) in close partnership with the FSM State Power Utilities, the FSM State Governments and the FSM Development Bank.

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