

PROJECT BRIEF

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EU-GIZ ACSE ADAPTING TO CLIMATE CHANGE AND SUSTAINABLE ENERGY



PACIFIC ISLANDS
FORUM SECRETARIAT



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Vanuatu: Solar and Biogas based Rural Electrification with the implementation of a sector-specific Climate Early Warning System

Background

The Republic of Vanuatu is an archipelagic nation of 83 islands in the south Pacific, 65 of which are inhabited. Vanuatu, with a population of 287,000, is included in the UN list of Least Developed Countries (LDCs).

Similar to other Pacific Island States, Vanuatu has no fossil fuel resources and thus has to import all fuel for transport and stationary use. Eighty percent of electricity is generated from imported diesel fuel and seventy percent of Vanuatu's population lack access to electricity services.

Climate-linked risks (such as cyclones, floods and droughts) pose increasing disaster response and energy planning challenges for Vanuatu, as it activates its National Energy Roadmap (NERM) plans that seek to achieve 65% Renewable Energy (RE) generation by 2020.

The project addresses the challenges of remote renewable electricity generation in the coastal community of Waisisi in Tanna. It will also address the supply of affordable and clean cooking fuel at two boarding schools: Onesua Presbyterian College (Efate) and Vanuatu Agricultural College (Santo); and through the installation of Automatic Weather Stations (AWS) as part of the Climate Early Warning System (CLEWS) component, the project will address the need to provide real time information available to the public on climate change events and risk factors.

Project Summary

Location: Tanna, Santo and Efate Islands, Vanuatu

Objective: To contribute towards improved access to sustainable energy and reduced vulnerability to climate change through enhanced energy security and strengthened adaptive capacity

Implementing Agency: Ministry for Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management

Budget: € 734,425

Duration: 2017-2018

Project Objective

The project will contribute towards improved access to sustainable energy and reduced vulnerability to climate change through enhanced energy security and strengthened adaptive capacity.

Current situation

The coastal community of Waisisi in Tanna is heavily dependent upon fishing for income generation. The community faces challenges in accessing markets and supplying quality produce because they do not have access to electricity for refrigeration.

The Onesua Presbyterian College (Efate) and Vanuatu Agricultural College (Santo) boarding schools each cater meals for around 400 people, which comes with a high Liquid Petroleum Gas (LPG) cost for cooking.



Vanuatu's dependence on fossil fuels is responsible for high energy costs across the country. The Vanuatu Department of Energy is tasked with achieving the nation's 65% RE target by 2020. Threats from natural disasters and climate-linked risks (cyclones, floods and droughts) constrains energy planning and has added new 'disaster response' requirements to the energy sector.

What Is EU-GIZ ACSE Doing?

The EU-GIZ ACSE programme helps people in 15 Pacific Island countries address two common challenges: adapting to climate change and reducing their dependence on fossil fuels.

GIZ is supporting the Government of Vanuatu to improve energy access to rural communities and strengthen national energy planning and help the energy sector in disaster response. This will be achieved through completion of the following project components.

Component 1. Increase Access to Sustainable Energy for Cooking and Thermal Energy Requirements

This component addresses the need for Vanuatu rural communities to find renewable energy alternatives to cooking and thermal energy needs. Biogas digesters will be installed in two boarding schools, which will showcase the ability of biogas digesters to convert agricultural wastes into cooking gas. Approximately 80% of Vanuatu's population lives rurally, and follow subsistence-agriculture based livelihoods. Biogas digesters can help reduce the fuel costs for rural people.

Component 2. Increase Rural Access to Sustainable Energy for Electrification

This component addresses rural electrification needs of Vanuatu. It works directly with the fishing community of Waisisi to provide a solar-powered fish processing and storage facility. The facility features solar freezers and will help the community keep their fish fresh and improve the quality of the produce that reaches the market. The project will also provide a basic solar power system for the community primary school.

Component 3. Improve Preparedness and Responses of Energy Stakeholders to Climate Linked Risks and Vulnerability

New Automated Weather Stations (AWS) will provide data for three Climate Early Warning Systems across Efate and Santo. The systems will provide vital weather data to assist the energy sec-



tor in planning and forecasting in order to meet energy targets as well as in deploying disaster management responses.

Organisational Context

The Ministry for Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management is leading the project with implementation support from the Ministry of Fisheries and Agriculture.

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