## NS-230 - Rural Electrification in Vanuatu

## Vanuatu

## **NAMA Seeking Support for Preparation**

A.1 Party

A.2 Title of Mitigation Action

A.3 Description of mitigation action

A Overview

Vanuatu

Rural Electrification in Vanuatu

The overall target of the NAMA is to support Vanuatu in achieving the goal defined in the National Energy Road Map (NERM), namely to provide access to electricity to all households in Vanuatu. The NAMA will reduce GHG emissions through the replacement of fossil fuels with renewable energies. The NAMA will also contribute to Sustainable Development (SD) benefits, such as improvement of the situation of groups with specific vulnerabilities, women and the poor.

The NAMA covers two interventions. Under Intervention 1, micro grids will be established. Rural communities/tourism and agricultural facilities/health centres/schools are the focus of these micro grids due to their demand for electricity for lighting, cooling and appliances. The micro grids will use renewable energy sources (solar, wind, hydro) and will provide electricity for lighting, radio and phone charging for households, and for service and production activities in Rural Productivity Zones (RPZs).

Intervention 2 will support extension of existing electricity grids on different islands. Households, public institutions and tourism/commercial consumers in the proximity of lines will be connected. Electricity will be provided for lighting, audio/TV, mobile phone charging, coastal fishing (refrigeration of the fish catch), tourism facilities (lodges), agricultural facilities (preparing, processing and packaging produces) or the production of handicrafts.

In its first phase, the NAMA aims to establish five micro grids under Intervention 1 and support the extension of five electricity grids in Intervention 2. This will provide electricity to around 1,000 households and around 4,700 people. Over the 15-year lifetime of the NAMA, emission reductions will reach around 13,500 tons of CO<sub>2</sub>.

Capacity-building will be a key component in the implementation of the NAMA. Special emphasis will be given to identifying and supporting the development of incomegenerating activities in the Rural Productivity Zones (RPZs), as this is the key to positive rural development. Another important component will be technical support during the identification and

implementation of the different projects under the two interventions, as the aim is to implement technically sound projects with low operating costs.

The baseline scenario for this NAMA consists of two components, a GHG baseline and a sustainable development (SD) baseline. Setting the baseline scenario in this way allows all effects to be properly assessed and quantified through the monitoring activities described in the Measurement, Reporting and Verification (MRV) system. In the MRV, the UN Framework Convention on Climate Change's (UNFCCC) "Small-scale Methodology: AMS-I.L.: Electrification of rural communities using renewable energy, Version 03.0" will be used to monitor GHG emission reductions.

The total cost of the NAMA is estimated at around US\$5.5 million. This includes support to cover the investment costs of the two interventions as well as extensive capacity-building efforts. Cyclone Pam, which hit Vanuatu in March 2015, has curtailed the ability of Vanuatu to contribute to the financing of the NAMA. In total, the Vanuatu government is committed to providing around 12 per cent of the required funding and the private sector is expected to contribute around 6 per cent. The remaining 82 per cent is expected to come from NAMA donors.

Implementation of the NAMA will be led by the Ministry of Climate Change and Natural Disasters as the NAMA Coordinating Authority (NCA). The National Advisory Board (NAB) will be appointed as NAMA Approver/Focal Point to the UNFCCC. The role of NAMA Implementing Entity (NIE) will be taken by the Department of Energy (DoE) in cooperation with the Project Management Unit (PMU).

The NAMA will receive capacity development support over a period of five years. Initial efforts will focus on securing national and international funding as well as establishing the institutional structure. The first five projects in each of the two interventions will be prepared and implemented in the years 2016 and 2017. Upon availability of additional funding, further projects can be implemented in the two interventions. After the implementation of the interventions, the NAMA will operate over a period of 15 years.

A.4 Sector	XEnergy supply Residential and Commercial buildings Agriculture Waste management	Transport and its Infrastructure Industry Forestry
	Other	
A.5 Technology	Bioenergy Energy Efficiency	Cleaner fuels Geothermal Energy

A.6 Type of action  A.7 Greenhouse gases covered by the action	X Hydropower   X Solar Energy   Ocean Energy   Low till / No till						
DM							
	mal Implementing Entity  Ministry of Climate Change and Natural Disasters						
B.1.0 Name B.1.1 Contact Person 1	Ministry of Climate Change and Natural Disasters						
B.1.2 Address	Namba 2 Area Port Vila, Vanuatu						
B.1.3 Phone	+678 25201						
B.1.4 Email	jbenjamin@vanuatu.gov.vu						
B.1.5 Contact Person 2							
B.1.6 Address							
B.1.7 Phone							
B.1.8 Email							
B.1.9 Contact Person 3							
B.1.10 Address							
B.1.11 Phone							
B.1.12 Email							
B.1.13 Comments							
	or the preparation of the mitigation action						
C.1	Number of months for completion 6						
	D Currency						
D.1 Used Currency	AED						
	Conversion to USD: 1						
	E Cost						
E.1.1 Estimated full cost of preparation	75000						
E.1.2 Comments on full cost of preparation	The full costs of preparation include the required technical support and stakeholder consultation meetings.						
	It is expected that the NAMA Design Document will be finalized and published by the end of September 2015.						
F Support required to prepare the mitigation action							
F.1.1 Amount of Financial support	or to propure the initiguitori dettori						

F.1.2 Type of required Financial support	X Grant Loan (sovereign) Loan (Private) Concessional loan  Other  Guarantee Equity Carbon finance					
F.1.3 Comments on Financial support	Financial Support is required to complete the NAMA Design Document.					
F.2.1 Amount of Technical support F.2.2 Comments on Technical support	The amount on the technical support is included in the estimated full cost of the preparation.  The Ministry of Climate Change will provide national technical support					
F.3.1 Amount of capacity building support	in addition to the required international support and cost is included on the estimated full cost of the preparation.					
F.3.2 Type of required capacity building support	X Individual level X Institutional level Systemic level					
F.3.3 Comments on Capacity Building support	Capacity building support is partly included in the costs for preparation of the NAMA Design Document (stakeholder consultation meetings) but in depth capacity building will be required for the implementation of the NAMA.					
	Capacity Building Support will be necessary for full engagement of the Ministry of Climate Change during the NAMA preparation and will entail stakeholder consultation meetings to ensure the establishment of a strong institutional dialogue.					
	Capacity Building will further be a key component in the implementation of the NAMA. Special emphasis will be given to identifying and supporting the development of incomegenerating activities in the Rural Productivity Zones (RPZs), as this is the key to positive rural development. Another important component will be technical support during the identification and implementation of the different projects under the two interventions, as the aim is to implement technically sound projects with low operating costs.					
F.4 Financial support required						
F.5 Technological support required						
F.6 Capacity support required						
G Relevant National Policies strategies.	, plans and programmes and/or other mitigation action					
G.1 Relevant National Policies	National Energy Road Map (NERM)					
G.2 Link to other NAMAs						
H Attachments						
H Attachments	Title Description					

H.1 H.2	Attachment description File			Browse			
		I Support re	eceived				
I.1 Outside the Registry							
I.2 With	in the Registry	Support provided	SIINNATIIVAE	Amount Commen	t Date		
		UNDP MDG Carbon	Financial,Capacity building,Technologica	al 81,000	1/27/2016 2:40:47 PM		