

**Ministry of Public Utilities and Infrastructure, Tuvalu Electricity Corporation
and
United Nations Development Programme**

**Facilitation of the Achievement of Sustainable National Energy Targets of Tuvalu
(FASNETT) – Local Project Appraisal Committee (LPAC), 27th September, 2017**

Minutes

Date: 27th September 2017

Venue: Tuvalu Telecommunications Board Room, Funafuti, Tuvalu

Chaired by: Mr. Avafoa Irata, Chief Executive Officer (CEO), Ministry of Public Utilities and Infrastructure (MPUI)

Time: 10:00am

Present:

1. Mr. Avafoa Irata, Chief Executive Officer (CEO), MPUI
2. Mr. Mafalu Lotolua, CEO, Tuvalu Electricity Corporation (TEC)
3. Mr. Fatoga Talamua, Senior Officer, TEC
4. Mr. Soseala Tinilau, Director, Department of Environment
5. Mr. Lusama Voli, Recovery Officer, Development Bank of Tuvalu
6. Mr. Paul Peniata, Loans Officer, Development Bank of Tuvalu
7. Ms. Seveleni Kapua, United Nations Coordination Officer, Tuvalu
8. Mr. Rogelio Z. Aldover, Project Design Lead Consultant
9. Ms. Emma Mario, Programme Analyst, Resilience & Sustainable Development Unit, UNDP Pacific Office in Fiji
10. Ms. Melaia Tarogi, Programme Associate, Resilience & Sustainable Development Unit, UNDP Pacific Office in Fiji

Discussions on the approved UNDP/GEF FASNETT project document

Project Organization Structure and Management

- Regarding the project's organization structure, existing personnel from UNDP and Government (both national and local) will assume the role of the Project Board. Likewise, the role of National Project Director (NPD) will be assumed by the Director of the Department of Energy. These positions are key for sustaining the project's initiatives after the project ends. New personnel required for the project's day-to-day operations, coordination and technical activities that will be hired by the project include: Project Manager, Deputy Project Manager, Finance and Administrative Assistant, Chief Technical Advisor (CTA), and technical consultants. Terms of References for the project board, PMU staff, etc are to be included in the revised project document.
- Regarding the project management budget and with reference to page 67, budget notes 51: there is potential financial risk if the Project Manager's cost is supplemented from Government co-financing. If co-financing is not available on time, then there are no funds to afford supplementary costs for the Project Manager. If funding sources to



supplement the Project Manager's costs will be funded by Government co-financing, then this needs to be highlighted during the project inception phase so it is budgeted for by Government.

- On the M&E plan (page 58), project board meetings need to be budgeted for drawing on experiences of other UNDP/GEF projects (e.g. NAPA-2, where honorariums are paid to board members to participate in board meetings). If funding sources for payment of honorariums are from Government co-financing, then this needs to be highlighted during the project inception phase so that it is budgeted for by Government.

Technical Components

- The demonstration of renewable energy (RE) application in Funafuti, through floating solar PV plants, will be designed to generate 100KW of electricity. This capacity could be scaled up to generate 200KW of electricity once the demonstration is accepted. If this is scaled up, it will meet 30% of the electricity demand for Funafuti. The Singapore RE Center has floating solar PV plants to showcase to developing countries with limited landmass and a south-south co-operation could be arranged as a project activity to convince Government and facilitate the application of this demonstration activity.
- Related to this, the Funafuti Council has verbally agreed that the mangrove pond could be used as the project site for the floating solar plant and therefore, TEC could lease the land for demonstration purposes. This needs to be officially documented by the Funafuti Council (Kaupule) as there have been prior discussions to re-locate all pig sties on Funafuti to the mangrove pond, which is the same site earmarked for the floating solar PV plant. The TEC will follow-up with the Funafuti Kaupule and will request an official letter confirming the use of mangrove pond as site for FASNETT demonstration. This issue will be addressed already before project inception. A task force needs to be set up to review potential environmental impacts and legal aspects of the demonstration site in Funafuti.
- Regarding the feasibility of using electric vehicles in small islands like Tuvalu, China has produced a lot of electric vehicles and its use is widely accepted. In Manila, some cities are converting to electric vehicles. While converting to electric vehicles are important for reducing greenhouse gas (GHG) emissions, the economic and operational costs of doing so in small island atolls with limited landmass would be a practical issue.
- With regards to the Environmental and Social Screening Procedure (ESSP), Standard 7, Question 7.3: This relates to the energy efficient (EE) component of FASNETT. Getting rid of energy inefficient fluorescent light bulbs, as well as hazardous materials need to be managed. In-line with the pre-PAC findings, a waste management activity could be inserted in the project document as part of revised project document. [Note: this is being incorporated as work-in-progress i.e. activity 2.3.1 – “include safety and environmental aspects of managing waste....”]
- Regarding private sector participation, this is not currently considered as important in Tuvalu. The Development Bank of Tuvalu has allocated budget for ‘low carbon funds’ (through a GEF/IUCN project), but this is not being fully utilized. Component 1 of FASNETT on awareness and private sector engagement should be a source of

motivation and encourage participation of the private sector. At present, there are 2-3 refrigeration companies however, they have not utilized these funds. Perhaps, the barriers are additional payments on the part of consumers, which could be considered by the project.

- Solar installations on rooftops could be a way of encouraging private sector investment. Access electricity could be sold to the TUC grid – as part of one of Tuvalu’s national development goals of developing ‘feed-in tariff’ to allow sale of access electricity to the grid.
- Since there is already a standalone solar system in Niulakita, another site could be selected as a FASNETT demonstration activity in outer islands. There is an opportunity to develop a ‘selection criteria’ for demonstration sites in the outer islands during the project inception phase.
- Regarding the recently formulated India proposal on solar home standalone systems Funatoa in Nukufetau, which could be considered as co-financing, TEC has already provided comments to UNDP headquarters regarding the budget and the need to increase it to cater for third party costs (i.e. UNDP).
- Moving from the RE baseline, a realistic/actual target would be ~90% instead of 100%. This takes into account the diesel generators that are still being largely used in outer islands. While biodiesel could be used as fuel for these generators, overseas-based markets for biodiesel need to be sourced as long as the price and import costs are commercially competitive.
- Even though OTEC was suggested during PPG phase, this is an expensive technology and has not been demonstrated successfully in Tuvalu.

Follow-up actions

The LPAC agrees that the following actions would be addressed and presented during the inception phase of the FASNETT:

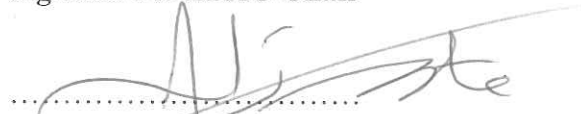
- Terms of References for the project board, PMU staff, etc are to be included in the revised project document.
- If funding sources to supplement the Project Manager’s costs and honorariums for Board members will be funded by Government co-financing, then this needs to be highlighted during the project inception phase so it is budgeted for by Government.
- UNDP needs to arrange for south-south co-operation with the Singapore RE Center to convince and secure Government buy-in on floating solar PV plants as part of the demonstration activity in Funafuti.
- The TEC will follow-up with the Funafuti Kaupule and will request an official letter confirming the use of mangrove pond as site for FASNETT demonstration. The Department of Energy needs to establish a task force to review potential environmental impacts and legal aspects of the demonstration site in Funafuti.
- In-line with the pre-PAC findings, a waste management activity needs to be inserted in the project document as part of revised project document. [Note: this is being incorporated as work-in-progress i.e. activity 2.3.1 – “include safety and environmental aspects of managing waste...”]
- The Department of Energy needs to develop a ‘selection criteria’ for selecting demonstration sites in the outer islands.
- UNDP headquarters needs to respond to TEC regarding the budget and the need to increase it to cater for third party costs (i.e. UNDP).



Recommendation

The LPAC members are pleased to note that the approved UNDP/GEF FASNETT project document has been appraised and recommend its approval on a no-objection basis.

Signature of LPAC Chair



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Mr. Avafoa Irata, Chief Executive Officer (CEO), MPUI

Date:17.10.2017.....