

# Scientific and Technical Advisory Panel

The Scientific and Technical Advisory Panel, administered by UNEP, advises the Global Environment Facility  
(Version 5)

## STAP Scientific and Technical screening of the Project Identification Form (PIF)

Date of screening: September 30, 2016  
Screener: Sarah Lebel  
Panel member validation by: Ralph E. Sims  
Consultant(s):

### I. PIF Information *(Copied from the PIF)*

FULL-SIZED PROJECT	GEF TRUST FUND
GEF PROJECT ID:	9574
PROJECT DURATION:	4
COUNTRIES:	Vanuatu
PROJECT TITLE:	Barrier Removal for Achieving the National Energy Road Map Targets of Vanuatu (BRANTV)
GEF AGENCIES:	UNDP
OTHER EXECUTING PARTNERS:	Department of Energy - Ministry of Climate Change & Natural Disaster (DOE-MCCND)
GEF FOCAL AREA:	Climate Change

### II. STAP Advisory Response *(see table below for explanation)*

Based on this PIF screening, STAP's advisory response to the GEF Secretariat and GEF Agency(ies):  
**Minor issues to be considered during project design**

### III. Further guidance from STAP

STAP welcomes the UNDP proposal "Barrier Removal for Achieving the National Energy Road Map Targets of Vanuatu (BRANTV)". The project intends to facilitate "the achievement of the sustainable energy, energy access and green growth targets" as stated in the NERM, which represents the objective of this proposed investment. This project involves deployment of clean energy systems to reduce greenhouse gas emissions in Vanuatu. Capacity building to help achieve low-carbon development and reach various targets such as the NDC is the main aim. STAP recognizes that the PIF is well developed scientifically and technically, yet has some minor concerns which should be addressed to help further strengthen the project.

The targets in the National Energy Road Map (NERM) are not being met so this project can help encourage a more rapid uptake of sustainable energy technologies. The IRENA report (2015) gave useful guidance on actions needed. Barriers to be overcome have been identified and clearly presented.

Nineteen existing projects have been identified in the baseline. Their total value is not provided but it is of some concern that additional input is still required to enable their successful uptake by removing barriers to their deployment. It is claimed that by themselves, these baseline projects, if successful, will not meet the NEMA targets and more effort is required as shown in the alternative scenario. The 5 components are aimed to bridge the gap.

Mitigation by the deployment of renewable energy and energy efficiency technologies is a major component of the ambitions for the project. Policy measures, low-carbon standards and regulations are key to making progress in the uptake of sustainable energy. Emphasis is given to electricity generation more than to process heat or transport fuels, although both of these can also make a contribution to the NDC.

Diesel-fuelled generating sets are the common form of electricity generation. Renewable energy resources are claimed to be good, though no data on mean annual wind speeds, solar irradiation levels or annual biomass volumes available is provided in the PIF. It is assumed that these parameters have been measured,

but if not, they should be assessed urgently since evaluating a renewable energy project cannot be done effectively if the local resources are not known.

The calculation of how to achieve "62,681 t CO<sub>2</sub> emission reduction" is not provided. (Can it really be determined that accurately?) What assumptions were used for the emissions factor for electricity generation? How was the emission reduction from transport biofuels assessed? How much CO<sub>2</sub> emission reduction does this project claim as an additionality over and above the avoidance from the other 19 projects already in progress? What is the approximate investment cost / t CO<sub>2</sub> avoided?

Given this is a 4 year project in the climate change mitigation focal area, this information is an omission from the PIF that will restrict the future monitoring and evaluation of the success (or otherwise) of the project.

There have been several GEF projects supporting sustainable energy deployment in the South Pacific. There is no indication in Section 7 "Knowledge Management" that these have been reviewed so that any lessons learned could be applied for the benefit of this project. Such a review is recommended as several have proved less successful than anticipated.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
<b>1. Concur</b>	In cases where STAP is satisfied with the scientific and technical quality of the proposal, a simple "Concur" response will be provided; the STAP may flag specific issues that should be pursued rigorously as the proposal is developed into a full project document. At any time during the development of the project, the proponent is invited to approach STAP to consult on the design prior to submission for CEO endorsement.
<b>2. Minor issues to be considered during project design</b>	<p>STAP has identified specific scientific /technical suggestions or opportunities that should be discussed with the project proponent as early as possible during development of the project brief. The proponent may wish to:</p> <p>(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised.</p> <p>(ii) Set a review point at an early stage during project development, and possibly agreeing to terms of reference for an independent expert to be appointed to conduct this review.</p> <p>The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p>
<b>3. Major issues to be considered during project design</b>	<p>STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical methodological issues, barriers, or omissions in the project concept. If STAP provides this advisory response, a full explanation would also be provided. The proponent is strongly encouraged to:</p> <p>(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised; (ii) Set a review point at an early stage during project development including an independent expert as required.</p> <p>The GEF Secretariat may, based on this screening outcome, delay the proposal and refer the proposal back to the proponents with STAP's concerns.</p> <p>The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p>