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 26, 2015 Screener: Lev Neretin

Panel member validation by: Ralph E. Sims
Consultant(s):

I. PIF Information *(Copied from the PIF)*
FULL SIZE PROJECT GEF TRUST FUND
GEF PROJECT ID: 9273
PROJECT DURATION : 4
COUNTRIES : Papua New Guinea
PROJECT TITLE: Facilitating Renewable Energy & Energy Efficiency Applications for Greenhouse Gas Emission Reduction (FREAGER)
GEF AGENCIES: UNDP
OTHER EXECUTING PARTNERS: Office of Climate Change & Development (OCCD)
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): **Concur**

III. Further guidance from STAP

1. Project focus on policy development to support RE and EE in PNG is commendable (since there is no national energy plan as such) and technology deployment is encouraged, including by financial support and improved awareness creation. Earlier capacity building programs are to be reviewed.
2. PNG has good RE resources but few have been captured to date due mainly, it is claimed, to lack of suitable expertise to identify and develop projects. Even the power utility PPL that employs technical experts, lacks capability on RE grid integration. This lack of expertise also applies to EE opportunities and as a result few private sector initiatives exist.
3. In spite of many previous efforts, there remains a lack of general understanding of the benefits from EE and RE. A number of projects funded by ABD, WB, NZAid, and governments are already in place on RE electricity generation, rural electrification, and RE resource mapping. Biomass and bioenergy is mentioned as having potential. Is biomass to be included in the RE resource assessment? There is no specific mention of renewable heat (arising from solar thermal or biomass) being incorporated in the proposed national energy plan or policies.
4. An ADB project on EE in the Pacific has been completed. However, as energy demand continues to grow with electrification, economic growth, and dependence on diesel fueled generation, GHG emissions are increasing. Nevertheless, there should be lessons to learn from the EE project and an evaluation of outcomes should be undertaken before further investment. While the proposal has some degree of assessment for RE technologies and options, EE options and sectors are not assessed properly.
5. The alternative scenario as proposed makes good sense in theory, though in practice it is fairly ambitious since there are many different threads running through it. So without the stated ~$15M investment from the national and provincial governments, it will not be achieved. There is also some concern over the present capacity of government departments to manage all the various sub-components given some are fairly specialist. So the capacity building component of the project is critical. Are there some people with knowledge gleaned from the previous capacity building projects who can assist? Who exactly will undertake the training of government officials, financiers, bankers?
6. The assessment of GHG reduction from the project is very tenuous. No details are provided and it will not be possible to measure whether the target reduction level of 4.795 Mt CO2-eq will be met based on the information provided. Under the proposed NEP there will be targets for EE and RE it is claimed, and this would enable GHG emission targets to be assessed. It is not clear when the NEP will be produced and there is no risk shown in Section 4 that it will not be produced. Success of the project appears to hinge on a NEP being produced, supporting policies being developed, and government funding invested in delivering on the targets. Is that likely to be achieved within the 4 year timeframe of the project? Updated GEF GHG

accounting guidelines should be used when reporting project emissions (available at: https://www.thegef.org/gef/node/11187).
7. Project proponents are advised to consult STAP guidance on biofuel projects available at: https://www.thegef.org/gef/node/11215
8. Community-based programs to support EE/RE are useful but given low awareness and lack of capacity, it is not clear how feasible they will be and how responsibilities will be shared between national and local authorities. This important part of the proposal needs further development and explanation of targeted approach. The latter may include support for RE options combined with capacity building in sustainable use of natural resources in targeted communities.

STAP advisory response	*Brief explanation of advisory response and action proposed*
1. Concur	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.
2. Minor issues to be considered during project design	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: (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, and possibly agreeing to terms of reference for an independent expert to be appointed to conduct this review. 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.
3. Major issues to be considered during project design	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: (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. The GEF Secretariat may, based on this screening outcome, delay the proposal and refer the proposal back to the proponents with STAP's concerns. 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.