

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: November 06, 2017
Screener: Sunday Leonard
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:	9787
PROJECT DURATION:	4
COUNTRIES:	Solomon Islands
PROJECT TITLE:	Stimulating Progress towards Improved Rural Electrification in the Solomons (SPIRES)
GEF AGENCIES:	UNDP
OTHER EXECUTING PARTNERS:	Ministry of Mines, Energy and Rural Electrification (MMERE)
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. This project aims to facilitate increased access to electricity in rural communities in the Solomon Islands.
2. Providing electricity access in rural communities can be successfully achieved through renewable energy systems, of which many examples exist. Policies and regulatory frameworks are however usually required to gain wide deployment. The annual Global Status Reports of REN 21 provide useful overviews - see http://www.ren21.net/wp-content/uploads/2017/06/17-8399_GSR_2017_Full_Report_0621_Opt.pdf
3. The project will utilize UNDP's Derisking Renewable Energy Investment (DREI) programme to assess RE electricity generation project proposals, mainly in off-grid areas, as an alternative to diesel generation systems which are costly, and have associated climate and environmental impacts.
4. Most of the funding, including USD 12.5M of co-financing by the Ministry of Mines, Energy and RE Electrification, will be invested in RE generation and energy efficient electricity projects to demonstrate how a range of barriers can be overcome. Capacity building and a service industry are critical for operation and maintenance of the projects continuing after completion of this 4-year project and is a key component of it.
5. Existing RE project plans are in place, (mainly solar PV and wind power, though not always successful if developed by NGOs and local communities), to help meet the National Energy Policy target of 35% rural community access to electricity by 2020. However, the lack of a regulatory framework has limited private sector involvement and consumer protection. This project will support the Ministry and Electricity Authority provide greater incentives through financial mechanisms, improve energy planning, and increase the bankability of future projects.
6. Technical barriers are outlined, but data are limited since a resource assessment of geothermal, hydro and bioenergy potentials does not appear to have been carried out. This should be the first step. The

specific and remote locations of some of these resources can restrict their development unless an investment is also made in costly infrastructure. Ocean energy is mentioned as an option, but it is currently not yet proven to be commercially viable (whether for wave, currents, or thermal gradients). Tidal range projects are operating successfully in France and South Korea, but a range of around 8m is available there, which is not the case in the Solomons. (For more information on ocean energy see Chapter 6 of <http://ipcc.ch/report/srren/>).

7. Overall, STAP acknowledges that the concept has merit on scientific or technical grounds. STAP is satisfied with the scientific and technical quality of the proposal and encourages the proponent to develop it with the same rigor. At any time during the development of the project, the proponent is invited to approach STAP to consult on the design.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
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	<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. (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>
3. Major issues to be considered during project design	<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>