

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:	9890
PROJECT DURATION:	5
COUNTRIES:	Myanmar
PROJECT TITLE:	Myanmar Rural Renewable Energy Development Programme
GEF AGENCIES:	UNDP
OTHER EXECUTING PARTNERS:	Department of Rural Development, Ministry of Agriculture, Livestock and Irrigation
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. The project aims to facilitate the expansion of renewable energy deployment, particularly in rural areas of Myanmar where electricity access is low, by developing policies to reduce investment risks and barriers. Strengthening capacity and supporting market enablers are key components needed in a country with little or no RE policy, and inefficient subsidy systems.
2. The involvement of several ministries which do not necessarily coordinate in the implementation of different RE technologies/systems makes RE project development challenging. The technical failure and poor operation of some existing RE projects confirm the need for implementing targeted training schemes.
3. Solar PV systems, small- and micro-hydro, and rice husk gasifiers are example technologies available in the country. All are mature, so technical risks are limited, especially if overseas experience is reviewed and adapted.
4. Some RE project developments already exist (as the baseline) supported by a range of finance organizations. The GEF project will glean lessons from these and help to deploy the information as part of the knowledge management component.
5. The government's National Rural Development and Poverty Plan and National Electrification Plan (NEP) will be enhanced by this project. Rural communities will benefit from gaining electricity supplies.
6. The project will undertake RE resource assessments, which is commendable. A significant amount of finance for this is to be provided from the Government co-finance.
7. Public sector investment of US\$5.5M is planned but not yet confirmed. It is assumed the project will proceed even if this contribution proves to be unsuccessful.

8. Around 0.9 Mt CO₂-eq (direct and indirect emissions) will be avoided by around 15 MW of new RE installations displacing diesel and kerosene mainly. Black carbon emissions from cooking and deforestation for fuelwood will also be reduced. Displacement of kerosene for lighting would also help avoid black carbon emissions as well as CO₂ emissions (see: Lam et al., 2012: <http://pubs.acs.org/doi/abs/10.1021/es302697h>; http://news.illinois.edu/NEWS/12/1210kerosene_TamiBond.html; Jacobson et al., 2013: https://www.brookings.edu/wp-content/uploads/2016/06/04_climate_change_clean_energy_development_hultman.pdf) and Tedsen et al., 2013: <https://www.ecologic.eu/sites/files/publication/2014/black-carbon-and-kerosene-lamps-study.pdf>

9. Overall, this project is well presented and should provide greater certainty to future investors by improving capacity, awareness, and financing so that the RE industry will evolve faster than otherwise projected and the development of more coal-fired plants will be unnecessary.

<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.</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>
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>