## 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: October 07, 2011 Screener: Lev Neretin

Panel member validation by: Nijavalli H. Ravindranath Consultant(s):

I. PIF Information (Copied from the PIF)
FULL SIZE PROJECT GEF TRUST FUND

GEF PROJECT ID: 4336 PROJECT DURATION: 4 COUNTRIES: Liberia

PROJECT TITLE: Lighting One Million Lives in Liberia

**GEF AGENCIES**: World Bank

OTHER EXECUTING PARTNERS: Liberia Rural and Renewable Energy Agency (RREA)

**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): Consent

## III. Further guidance from STAP

STAP welcomes this initiative in Liberia. The broad objective of the project is to support the development of sustainable energy supplies and services in this country. The project further aims to support capacity strengthening and policy regulations for market development in Liberia, and specifically aims at promoting solar energy for the rapid scale up of access to modern lighting. STAP provides consent to the PIF. However, the following issues could be addressed during the full project development:

- 1. Rationale for focusing on solar lanterns: Did the project proponents consider other renewable energy technologies for lighting, such as micro-hydro, biomass power and wind energy. Thus the rationale for selecting only solar lanterns is not clear.
- 2. Lessons from Lighting Africa Programming have not been adequately considered. Lighting Africa Programme is mentioned and a few generic strategies are considered, such as quality control, market intelligence, consumer awareness, finance facilitation, etc. What is suggested is that Liberia could make a systematic evaluation of the Lighting Africa Programme and identify clear strategies for policy as well as market development.
- 3. Sustainability of lighting programme: During the next phase of the project cycle, sustainability of the lighting programme post GEF project period should be considered to show how lighting programme would expand and continue beyond the GEF project period. What is the past experience of Lighting Africa Projects with respect to sustainability of past investments?
- 4. Cost of Solar Lanterns: The PIF states that under the baseline scenario households are paying very high cost for diesel fuel based power generation. A solar lantern would cost around \$40 with a potential net cost of \$29 for the households. This could be a potential barrier for many poor households and this risk/barrier needs to be addressed.
- 5. Baseline project and scenario: A systematic assessment of the baseline scenario with respect to quantitative estimates of diesel and kerosene use, as well as, the spread of solar lanterns and their projections under no project scenario into the future is suggested.

STAP advisory	Brief explanation of advisory response and action proposed
response	
1. Consent	STAP acknowledges that on scientific/technical grounds the concept has merit. However, STAP may
	state its views on the concept emphasising any issues that could be improved and the proponent is

		invited to approach STAP for advice at any time during the development of the project brief prior to submission for CEO endorsement.
2.	Minor revision required.	STAP has identified specific scientific/technical suggestions or opportunities that should be discussed with the proponent as early as possible during development of the project brief. One or more options that remain open to STAP include:
		<ul> <li>(i) Opening a dialogue between STAP and the proponent to clarify issues</li> <li>(ii) Setting a review point during early stage project development and agreeing terms of reference for an independent expert to be appointed to conduct this review</li> <li>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.</li> </ul>
3.	Major revision required	STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical omissions in the concept. If STAP provides this advisory response, a full explanation would also be provided. Normally, a STAP approved review will be mandatory prior to submission of the project brief for CEO endorsement.  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.