

# 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 21, 2015

Screeners: Virginia Gorsevski

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:** 9292

**PROJECT DURATION :** 3

**COUNTRIES :** Liberia

**PROJECT TITLE:** Increasing Energy Access through the Promotion of Energy Efficient Appliances in Liberia

**GEF AGENCIES:** AfDB

**OTHER EXECUTING PARTNERS:** Ministry of Lands, Mines and Energy

**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

Liberia has an energy supply scarcity problem for most of its population and one of the lowest electricity access rates in the world. So wasting electricity by the use of inefficient appliances should be avoided. As part of this proposed project, energy efficiency measures will be strengthened by policies, financial mechanisms and training of government officials. It is encouraging to see the link with the National Climate Change Secretariat as reducing the energy demand will in theory result in lower CO2 emissions.

However, in a country such as Liberia where there is a major electricity constraint, it is unlikely that a reduction in total energy used and GHG reductions will result from energy efficiency measures since new demand will rapidly grow and absorb any savings resulting from efficiency measures. GHG emission reduction will more likely occur from the substitution of diesel generation with renewables. Even replacing incandescent bulbs with LEDs when powered by small, privately owned diesel/gasoline gensets will experience this "rebound effect" in that the electricity saved may well be used for other purposes.

The best indicator for monitoring any improvement in energy efficiency under these circumstances is energy intensity (such as GJ energy input per unit of GDP). The deployment of energy efficient appliances will enable the operator/user to get the same energy services with less energy inputs. This will enable the same generation capacity to supply more people and businesses who can benefit from electricity access and move away from dependence on LPG, charcoal and fuelwood. Cost savings depend on the incremental cost increase for an energy efficient appliance over a standard model, and the amount of energy saved. A major shortcoming of this PIF is the fact that cost analyses were not presented.

Overall the project proposal includes some encouraging ideas, but it could be better thought through and tightened up in order to maximize the benefits for Liberia from the GEF investment.

<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.

<p><b>2. Minor issues to be considered during project design</b></p>	<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>
<p><b>3. Major issues to be considered during project design</b></p>	<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>