Scientific and Technical Advisory Panel

The Scientific and Technical Advisory Panel, administered by UNEP, advises the Global Environment Facility

STAP Scientific and Technical screening of the Project Identification Form (PIF)

Date of screening: 18th May 2009  
Screener: Lev Neretin  
Panel member validation by: N.H. Ravindranath

I. PIF Information

Full size project  GEF Trust Fund  
GEF PROJECT ID: 3788  
COUNTRY(IES): KENYA, UGANDA, RWANDA, BURUNDI AND TANZANIA  
PROJECT TITLE: PROMOTING ENERGY EFFICIENCY IN BUILDINGS IN EASTERN AFRICA  
GEF AGENCY(IES): UNEP  
OTHER EXECUTING PARTNER(S): UN-HABITAT  
GEF FOCAL AREA (S): CLIMATE CHANGE  
GEF-4 STRATEGIC PROGRAM(S): CC-SP1-BUILDING-EE  
NAME OF PARENT PROGRAM/UMBRELLA PROJECT: N.A.

II. STAP Advisory Response (see table below for explanation)

1. Based on this PIF screening, STAP’s advisory response to the GEF Secretariat and GEF Agency(ies):
   Consent

III. Further guidance from STAP

1. The project aims to promote EE and environmentally responsible measures in buildings.
2. STAP recommends choosing technological interventions for promoting EE based on scientific analysis considering such factors as energy consumption and GHG emission projections.
3. A scientific barrier analysis to the promotion of EE is necessary to prioritize project interventions.
4. There is a need to have baseline projections of energy consumption and GHG emissions from building sector.
5. PIF does not specify the focus of project interventions on residential or commercial buildings or both?
6. The incremental cost barrier of shifting to EE systems have to be addressed at the CEO endorsement phase.
7. A significant amount of energy use in buildings is consumed to provide cooling. The use of white roofs can reduce energy consumption for air conditioning in the space immediately under the roof by 10%-20%. Akbari et al (2008) [Akbari, H., S. Menon, and A. Rosenfeld. 2008. “Global Cooling: Increasing World-wide Urban Albedos to Offset CO2,” Climatic Change, DOI 10.1007/s10584-008-9515-9] estimated that retrofitting 100 m² of roof with a white material replacing a dark material offsets 10 tonnes of CO₂ emissions. Project proponents are advised to consider white roofs concept as an integral part of interventions promoting passive design of buildings.
8. Project intends to promote replacement of electric heater with solar water heaters and incandescent lamps with CFLs as key interventions targeting EE measures in appliances. More details should be provided and scientific criteria proposed for selecting particular energy-efficient appliances. How proposed national reforms of building policies and codes will consider measures aimed at improving EE of appliances (such as codes, labels, MES)? It may be desirable to identify policies and measures to enforce EE standards and labels.
9. How the lessons learnt in promoting EE in buildings, from one country to another, be transferred? What institutional arrangements could be designed to transfer the lessons?

<table>
<thead>
<tr>
<th>STAP advisory response</th>
<th>Brief explanation of advisory response and action proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consent</td>
<td>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.</td>
</tr>
</tbody>
</table>
| 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:
   (i) Opening a dialogue between STAP and the proponent to clarify issues
   (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
   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 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. |