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: 11-3-2008

Screener: Douglas Taylor

Panel member Review and validation by:N.H. Ravindranath

I. PIF Information
GEFSEC PROJECT ID: 2942
GEF AGENCY PROJECT ID: 3646
COUNTRY(IES): Turkey
PROJECT TITLE: Promoting Energy Efficiency in Buildings
GEF AGENCY(IES): UNDP,
OTHER EXECUTING PARTNER(S): EIE (General Directorate of Electrical Power Resources Survey, Turkey)
GEF FOCAL AREA (S): Climate Change
GEF-4 STRATEGIC PROGRAM(S): CC – 1 Promote energy-efficient buildings and appliances
NAME OF PARENT PROGRAM/UMBRELLA PROJECT: N/A

Full size project GEF Trust Fund

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

2. ***i) Scientific Justification:*** How will the building codes and standards be revised? Where will the best practices come from (EU standards?). What methods and approaches will be used for revising the building performance standards and for developing integrated building designs? What is the source of best technologies? Which key energy efficiency technology options will be selected for co-financing and what will be the criteria.
    a. What are the components of integrated building design. Will they be developed or already available (source). How different is the integrated building designs compared to building codes.
    b. National reporting of building energy consumption, is it feasible and necessary.
    c. Which energy efficient technologies are identified for co-financing?

    Conclusions of Intergovernmental Panel on Climate Change provide a potential list of measures with large mitigation potential as well as low cost mitigation measures for Economies in Transition (IPCC, 2007). It may be useful to identify the, most effective and cost-effective, technologies as well as policy instruments aimed at mitigating GHG emissions in the building sector using the best practices. Some examples of mitigation options with largest potential for mitigation include; efficient lights, efficient appliances such as air conditioners and refrigerators, water and space heating control system, low GHG construction materials, improved insulation and district heating in colder climates and space cooling and ventilation in the warmer climates. IPCC has included that it is possible to achieve 75% of energy savings in individual new buildings. Further, IPCC concluded that realizing such high savings requires an integrated design process involving architects, engineers, contactors and clients with full consideration of opportunities for passively reducing the energy demands of buildings (IPCC, 2007).
    ii) Methods of monitoring energy efficiency and GHG reduction: What methods and techniques will be used for monitoring energy conservation and GHG reduction. Will there be Control Groups of buildings for assessing the impacts of technological interventions.
    iii) Cost-effectiveness and financial viability: Are there incremental costs to adopting energy efficient technologies. Will the financial analysis of the investments in energy efficient equipments and practices be carried out to show the financial viability?
    iv) Risks: The risk of higher investment costs for energy efficient devices and practices as a barrier to spread of the technologies is not considered.

    Reference: IPCC, 2007, Climate Change; Mitigation of Climate Change.

STAP advisory response	*Brief explanation of advisory response and action proposed*
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: (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.