

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: 26th January 2010

Screener: Lev Neretin

Panel member validation by: N.H. Ravindranath

I. PIF Information

GEFSEC PROJECT ID: 4165

COUNTRY(IES): THAILAND

PROJECT TITLE: **PROMOTING ENERGY EFFICIENCY IN COMMERCIAL BUILDINGS IN THAILAND (PEECB)**

GEF AGENCY(IES): **UNDP**

OTHER EXECUTING PARTNERS: **DEPARTMENT OF ALTERNATIVE ENERGY DEVELOPMENT AND EFFICIENCY (DEDE), UNDER MINISTRY OF ENERGY**

GEF FOCAL AREAS: **CLIMATE CHANGE**

GEF-4 STRATEGIC PROGRAM(S): **CC-SP1: PROMOTING ENERGY EFFICIENCY IN RESIDENTIAL AND COMMERCIAL BUILDINGS**

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: **FRAMEWORK FOR PROMOTING LOW GREENHOUSE GAS EMISSION BUILDINGS**

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 at the promotion and facilitation of building EE technologies and practices. The focus is on reducing GHG emissions from the operation of commercial buildings through EE technologies. It be achieved through awareness enhancement on EE, developing EE building framework, technology demonstration and replication. The proposal is comprehensive and describes all the necessary outputs and activities required to achieve the goals. The demonstration component in particular deserves to be complimented. Below STAP offers a few suggestions to be considered during project development.
2. **Technology selection and assessment:** IPCC and IEA have recommended a large number of EE technologies for the commercial building sector. There is a need to make an assessment of different technologies with respect to technology performance (reliability and efficiency), investment cost and energy saving potential at the project preparation stage.
3. **Barriers:** Lack of access to information is identified as one of the main barriers. Other barriers are policy and fiscal barriers, technical barriers, and absence of convincing financial models and replicable demonstrations. Conducting a systematic barrier analysis is recommended.
4. **Lessons learned:** In Thailand several projects with similar objectives have been or are being implemented. The lessons learnt from these projects need to be adequately built into the present proposal.
5. **Benefit-cost analysis of investments:** There is a need for a detailed assessment of returns on investment and benefits and costs for the proposed EE technological interventions. Proving of the profitability of the investment in EE technologies in terms of energy savings, and cost savings to the commercial building owners is one of the most important issues to be addressed in the project.

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	STAP has identified specific scientific/technical suggestions or opportunities that should be discussed with the proponent as

<p>required.</p>	<p>early as possible during development of the project brief. One or more options that remain open to STAP include:</p> <ul style="list-style-type: none"> (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 <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>3. Major revision required</p>	<p>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.</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>