

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: April 29, 2012

Screeners: 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: 4866

PROJECT DURATION : 4

COUNTRIES : China

PROJECT TITLE: Promoting Energy Efficiency in Industrial Heat Systems and High Energy-consuming (HEC) Equipment

GEF AGENCIES: UNIDO

OTHER EXECUTING PARTNERS: China Special Equipment Inspection and Research Institute (CSEI) / General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ)

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

The project aims at promoting energy efficiency in HEC through a comprehensive approach, developing revised technical regulations, providing training to national experts and establishing a national HEC special equipment energy efficiency testing centre.

STAP welcomes this initiative, however the Panel wishes to suggest a number of minor points that could be considered in the project design:

1. Systems optimization: STAP commends China for aiming at systems optimization to reduce energy consumption, since national and international experience widely agree that while improving the efficiency of components might yield minor gains in industry, but a systemic optimization can result in more significant gains (20-30%) with pay back periods, in some cases less than 2 years. However, there is a need for a systematic assessment of what systems optimization involves; technology packages, capacity requirements, investment cost, O&M costs, etc.? Systems optimization may involve in some cases large investments for HEC equipment. Thus it is very important to assess the investment cost as well as cost-benefit analysis of new designs for efficient HEC equipment.
2. Barrier analysis: STAP commends the detailed listing of barriers for different technologies. However during the next phase, it is important to conduct a systematic assessment of the barriers and rank them according to technologies and stakeholders.
3. Promotion of efficient HEC equipment: The project seems to focus largely on issues such as establishing testing centers, building capacity, conducting training programs, creating awareness, preparation of business plans and plant assessments. These are of course necessary and an integral part but, the access to robust technologies, maintenance and service guarantees, and financial viability are equally critical and need to be considered.
4. Learning lessons from similar projects in China: Several energy efficiency improvement projects funded by national and multilateral agencies including GEF have been implemented in China. It is necessary to learn from the past and ongoing projects for successful implementation of this initiative.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
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.	<p>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:</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>
3. Major revision required	<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>