

# 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:** 4893

**PROJECT DURATION :** 5

**COUNTRIES :** India

**PROJECT TITLE:** Promoting Industrial Energy Efficiency through Energy Management Standard, System Optimizat on and Technology Incubation

**GEF AGENCIES:** UNIDO

**OTHER EXECUTING PARTNERS:** Bureau for Energy Efficiency (BEE); Ministry of Micro, Small and Medium Enterprise and Bureau of Indian Standards (BIS)

**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 to serve a dual objective of i) promoting energy efficiency by introducing ISO energy management standard 50001 and integrating system optimization practices in industry and ii) facilitating formation of technology incubators to catalyze innovation and technology transfer for cross-cutting technologies. STAP welcomes this initiative, and suggests a number of considerations for future project development:

1. **Systems optimization:** The project aims at achieving larger energy savings through system optimization especially for steam, pumping and compressed air systems. STAP commends India for aiming at systems optimization to reduce energy consumption, since national and international experiences 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. Thus it is very important to assess the investment cost as well as cost-benefit analysis of adopting system optimization.
2. **Barrier analysis:** Several barriers have been listed and they seem like a generic set of barriers listed for most PIFs on energy efficiency. During the next phase, STAP suggests conducting systematic barrier analysis from the perspective of different stakeholders as well as for different technologies as well as rank the barriers so that targeted interventions can be designed for implementation in the project.
3. **Developing benchmarks:** The PIF states that the project aims at development of benchmark technologies and practices in order to guide the industries in reducing energy consumption levels. In addition, the PIF is silent what sectors/industries will be beneficiaries of this benchmarking process.
4. **Demonstration projects:** Which specific industries or technologies would be considered for demonstration, since the proposed eight energy intensive sectors could cover hundreds of technologies/processes and industries?

5. Baseline: A systematic baseline needs to be developed, considering the various ongoing mechanisms and interventions such as PAT and other national programs and international projects aimed at promoting energy efficiency in industries.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
<b>1. Consent</b>	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.
<b>2. Minor revision required.</b>	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: <ul style="list-style-type: none"> <li>(i) Opening a dialogue between STAP and the proponent to clarify issues</li> <li>(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</li> </ul> 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.
<b>3. Major revision required</b>	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.