

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: 10th November 2008

Screener: Lev Neretin

Panel member validation by: N.H. Ravindranath

I. PIF Information

Full size project GEF Trust Fund

GEFSEC PROJECT ID: 3747

GEF AGENCY PROJECT ID: 4113

COUNTRY(IES): TURKEY

PROJECT TITLE: IMPROVING ENERGY EFFICIENCY IN INDUSTRY

GEF AGENCY(IES): UNDP, UNIDO

OTHER EXECUTING PARTNER(S): GENERAL DIRECTORATE OF ELECTRICAL POWER RESOURCES SURVEY AND DEVELOPMENT ADMINISTRATION (EIE), TECHNOLOGY DEVELOPMENT FOUNDATION OF TURKEY (TTGV)

GEF FOCAL AREA (S): Climate Change

GEF-4 STRATEGIC PROGRAM(S): SP#2: PROMOTING ENERGY EFFICIENCY IN THE INDUSTRIAL SECTOR

NAME OF PARENT PROGRAM/UMBRELLA PROJECT:

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. STAP welcomes this very well prepared *Industrial Energy Efficiency* project for Turkey. The project aims to improve Energy Efficiency in industries by strengthening policy and institutional framework, capacity building, raising awareness and demonstration of Energy Efficient technologies and financing models. The PIF is very detailed and provides significant information on the various aspects of the industrial energy situation in Turkey. The proposal has clearly highlighted the existing Energy Efficiency laws and programmes, the key energy intensive industries and has explained the Components and Activities in adequate detail, along with a good assessment of the risks and the mitigation measures. The project proponent seems to have a very good understanding of the policies, programmes, institutions, technologies and limitations. The criteria for selecting the demonstration projects are also provided in the PIF. The project also considers the sustainability issue adequately. The project makes a very good case of the consistency of the proposed interventions for promoting the Energy Efficiency with the existing Energy Efficiency laws and programmes of Turkey. However, STAP makes a few following suggestions to be considered in the next stage of project development;
 - i. **Technological, Policy and Capacity Building Interventions and Innovations:** The PIF has highlighted the dominant sectors with respect to energy consumption and savings potentials. The project could adopt scientific criteria, including the mitigation potential (t CO₂), investment costs, financial viability, cost of mitigation (\$/tCO₂) and transaction costs, in selecting the interventions to promote Energy Efficiency effectively. Turkey has very progressive Energy Efficiency laws and programmes. STAP recommends linking the Components and Activities proposed in the project to the different provisions of the Energy Efficiency laws of Turkey, which would enhance effective targeting of measures. The project could also analyse *Component vs. System* level interventions for cost effectiveness assessment (units of energy conserved per unit of investment). The criteria for selecting demonstration projects could also include the transaction costs as well as the cost-effectiveness of mitigation.
 - ii. **Barrier Analysis:** All the relevant barriers are adequately considered in the proposal. However, a scientific analysis of the barriers leading to ranking and prioritisation would enable effective targeting of the interventions to overcome the barriers. The project clearly states the financial viability of the Energy Efficient technologies, with very low payback period. Thus, there is a need for a scientific assessment of the barriers, despite the financial attractiveness of the interventions.

- iii. **Risks and Mitigation Measures:** A very good assessment of risk and mitigation measures is provided. The risk of the incremental investment capital and lack of access to finance, for large scale spread of Energy Efficient technologies could also be considered along with potential mitigation measures.

<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.	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"> (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.