

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: March 29, 2013

Screeners: Lev Neretin

Panel member validation by: Ralph E. Sims

Consultant(s):

I. PIF Information *(Copied from the PIF)*

FULL SIZE PROJECT **GEF TRUST FUND**

GEF PROJECT ID: 4900

PROJECT DURATION : 5

COUNTRIES : India

PROJECT TITLE: Scale Up of Access to Clean Energy for Rural Productive and Domestic Uses

GEF AGENCIES: UNDP

OTHER EXECUTING PARTNERS: Ministry of New and Renewable Energy (MNRE)

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

STAP expresses its consent for this project focused mainly on energy access for all in India. Several initiatives are already in place in India so it will be challenging to determine what specific impact this GEF project would have on the rate of clean-energy technology deployment by overcoming the barriers as identified. Targeting specific districts and rural village communities that are currently under-served as demonstrations is the way to overcome this. However, the selection of those should be based on a set of predefined criteria. One of the criteria could be willingness by the residents to become involved in the project for example, possibly coupled with having a strong leader to act as "champion". Other could include feasibility of particular RE resource, cost-effectiveness and others.

1. The PIF is not clear on how the renewable energy resources in a given location will be assessed as a first step into planning which technologies to invest in. For example, one site in a valley may have mean annual wind speeds less than half of another site in the nearby hills, so wind turbines in the valley would generate much lower levels of electricity per year and not be a viable option. For biomass gasification, assessing the available biomass supply on an all-year-round basis, and securing sufficient supplies is imperative. STAP recommends conducting detailed renewable resource assessment which is now seems to be a gap in this proposal.

2. The total costs of mitigation for 0.6 MtCO₂-eq are relatively high (around \$50/t including all co-finance) but the co-benefits of energy access etc should also be considered and estimated as far as feasible to help assure sustainability of project results.

3. STAP recommends undertaking risk assessment for this project. Its success depends significantly on a number of factors such as practical feasibility of a particular RE resource and supplies (in case of biomass residues), its societal acceptance, cost-effectiveness, provision of regulatory and financial incentives and other factors.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
1. Consent	STAP acknowledges that on scientific or technical grounds the concept has merit. However, STAP may state its views on the concept emphasizing any issues where the project could be improved. Follow up: The GEF Agency is invited to approach STAP for advice during the development of the project prior to submission of the final document for CEO endorsement.

<p>2. Minor revision required.</p>	<p>STAP has identified specific scientific or technical challenges, omissions or opportunities that should be addressed by the project proponents during project development.</p> <p>Follow up: One or more options are open to STAP and the GEF Agency:</p> <p>(i) GEF Agency should discuss the issues with STAP to clarify them and possible solutions.</p> <p>(ii) In its request for CEO endorsement, the GEF Agency will report on actions taken in response to STAP's recommended actions.</p>
<p>3. Major revision required</p>	<p>STAP has identified significant scientific or technical challenges or omissions in the PIF and recommends significant improvements to project design.</p> <p>Follow-up:</p> <p>(i) The Agency should request that the project undergo a STAP review prior to CEO endorsement, at a point in time when the particular scientific or technical issue is sufficiently developed to be reviewed, or as agreed between the Agency and STAP.</p> <p>(ii) In its request for CEO endorsement, the Agency will report on actions taken in response to STAP concerns.</p>