

# 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: October 07, 2013

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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: 5072**

**PROJECT DURATION : 5**

**COUNTRIES : Russian Federation**

**PROJECT TITLE:** Transfer of Environmentally Sound Technologies for Industrial Climate Change Mitigation in the Republic of Tatarstan, Russian Federation

**GEF AGENCIES:** UNIDO

**OTHER EXECUTING PARTNERS:** Ministry of Ecology of the Republic of Tatarstan,  
Ministry of Forestry of the Republic of Tatarstan,  
Volga International Cleaner Production Centre

**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): **Minor revision required**

### III. Further guidance from STAP

The project aims at mitigating climate change through reducing GHG emissions in key manufacturing industries through improved resource efficiency and improvement in energy efficiency in Republic of Tatarstan, Russian Federation. Further, it also aims to produce tree seedling planting material for agroforestry and carbon sink enhancement activities.

The PIF is very well prepared and involves many innovative components and approaches developed by UNIDO for promoting environmentally sustainable technologies. Capacity building is a key part of this nursery project and is well covered in the proposal. STAP complements UNIDO and Russian Federation for the PIF. However, STAP has a number of comments and suggestions which it believes will further strengthen the project.

1. The project has two components namely promoting GHG abatement technologies in key manufacturing industries and secondly, developing an agro-industry to produce nursery tree planting material for afforestation.
  - a. The first component of focusing on manufacturing industries seems obvious for UNIDO to pursue.
  - b. However, it is not clear why forest nursery seedling development component is incorporated into the project. The PIF states that improving energy efficiency will be achieved in nursery development. Normally, nursery development for afforestation is not an energy intensive activity. Thus STAP recommends serious reconsideration of the nursery component of the project and consideration as to how it could be more closely linked with broader afforestation policies and objectives.
2. STAP complements Component 1 for providing a systematic approach for identification, prioritization and selection of manufacturing industries and clusters for project intervention. The 3 approaches, TEST, Hot Spot methodology and ITPO, will assist in clearly focussing on the key manufacturing industries for promoting ESTs.
3. STAP recommends cost-benefit analysis be undertaken of the interventions from the perspective of the manufacturers to minimize the risk of acceptance by the industries.

4. A long explanation for the baseline is given, however the key barriers and limitations of the ongoing baseline scenario policies and projects in delivering GHG reduction are not clearly identified.
5. The investment component of the project is not clear. Will there be demonstration of the GHG abatement technologies?
6. Continuing to improve the energy intensity of the manufacturing industries by encouraging greater uptake of cost-effective energy efficient technologies and methods makes good sense. UNIDO has a good track record in this area. The capacity building component is well thought through.
7. The tree nursery component includes advice on species selection for the proposed riverbank/flood plain plantings. It is commendable that autochthonous species are being targeted, though there are many instances elsewhere where exotic varieties can out-perform them in terms of biomass yield/ha/yr and hence C uptake. What is not clear is whether the forest plantings are to become permanent conservation forests, or to be harvested and replanted at intervals.
8. In essence this is two projects in one proposal. They are tenuously linked by improving energy efficiency used in the nurseries, but could be better linked if consideration was given to develop policies to induce process manufacturers to offset their GHG emissions by investing in certified afforestation schemes. Another option that could be considered would be using forest plantations as a land treatment system for organic wastes from food and fiber processing industries. The biomass produced could then be harvested for bioenergy applications (to provide low-carbon heat and power) and replanted to continue the cycle.
9. The present calculation for C sequestration in the proposal is correct for a conservation forest, but there must be a limit to how much available land can be considered as "neutral" with no opportunity cost from afforestation. Should the biomass be utilised for energy purposes to displace coal or gas, the carbon offset becomes much higher since it does not stop once the forests mature and a revenue stream can be obtained.
10. What is not clear is how the tree seedlings are to be planted. This is possibly manually at present, but for containerized seedlings, this can be highly-mechanized using tractor operated transplanters assuming the terrain is reasonably flat or undulating. There is therefore an opportunity to consider modernising the whole system as part of this project, and reducing GHG emissions as a result.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
<b>1. Consent</b>	<p>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.</p> <p>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>
<b>2. Minor revision required.</b>	<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:            (i) GEF Agency should discuss the issues with STAP to clarify them and possible solutions.            (ii) In its request for CEO endorsement, the GEF Agency will report on actions taken in response to STAP's recommended actions.</p>
<b>3. Major revision required</b>	<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:            (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.            (ii) In its request for CEO endorsement, the Agency will report on actions taken in response to STAP concerns.</p>