

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, 2011

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: 4682

PROJECT DURATION : 36

COUNTRIES : Global (Colombia, Kenya, Swaziland)

PROJECT TITLE: SolarChill Development, Testing and Technology Transfer Outreach

GEF AGENCIES: UNEP

OTHER EXECUTING PARTNERS: UNICEF, Programs for Appropriate Technologies in Health (PATH), Greenpeace International, Danish Technological Institute (DTI), Gesellschaft für Technische Zusammenarbeit (GIZ)

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 commercialize and transfer the solar chill vaccine refrigerator (Solar chill A) and to begin the process of commercializing and transferring the Solar Chill and light commercial refrigerator (Solar Chill B). STAP suggests that the following issues to be addressed during the full project development phase:

1. Rationale for selecting solar chill technology: The social and health implications of solar Chill A systems are well recognized and commendable. However, the GHG implications are likely to be marginal given a very small-scale baseline activity requiring the technology.
2. TT challenges to be faced by SolarChill B technology are different from a narrower vaccine storage market for SolarChill A. SolarChill B is to be used for general food storage in areas with unreliable electricity and targets residential and commercial markets. Analysis of supply/demand in these markets, of competing products and of specific market barriers are needed for successful promotion of this technology in selected countries. Globally, this technology might face even larger risks of non-uptake. Analysis of market barriers and how project aims to address them is recommended during project preparation.
3. Baseline scenario: It is not clear from the PIF what is the scale of demand for solar chilling technology. The number of units in use currently and the projected demand for the same are necessary to estimate during project preparation.
4. Selection of countries: The rationale and the advantages of combining Colombia with Kenya and Swaziland could be explored further, to maximize the synergies. Why, even if successful, transfer of solar chillers will be taken up globally? What actions project proposes to assure appropriate dissemination and transfer of this technology to other developing countries?
5. Cost-effectiveness: Cost of the unit and maintenance: The cost implications of the Chiller A technology needs to be addressed. Further, the risks associated with the maintenance of the system in rural locations need to be addressed.

| <i>STAP advisory response</i> | <i>Brief explanation of advisory response and action proposed</i> |
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| 1. Consent | STAP acknowledges that on scientific/technical grounds the concept has merit. However, STAP may |

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| | 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> |