## **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 19, 2011 Screener: Lev Neretin

Panel member validation by: Nijavalli H. Ravindranath Consultant(s):

I. PIF Information (Copied from the PIF)
FULL SIZE PROJECT MULTI TRUST FUNDS

**GEF Project ID**: 4512 **Project Duration**: 2.5 **Countries**: Regional

PROJECT TITLE: Pilot Asia-Pacific Climate Technology Network and Finance Center

**GEF AGENCIES: ADB and UNEP** 

OTHER EXECUTING PARTNERS: National governments and other public institutions, private sector, regional and

national thematic or sector/technology specific centers or research institutions, academia

**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

This project is the first pilot in the GEF responding to the Cancun Agreements on technology transfer. The project intends to assist developing countries in Asia and Pacific to put in place appropriate policies and measures facilitating transfer of environmentally sound technologies through the establishment and strengthening of the network of national and regional centers, policy reform and demonstrations, and catalytic financing.

- 1. The project aims at accelerating climate technology transfer of low-carbon and climate resilient technologies promoting both mitigation and adaptation. However, most of components, activities and policies described in the PIF are all focused on mitigation and adaptation is not treated adequately. STAP recommends that the project either focuses on mitigation only or provides equal / rational consideration for both mitigation and adaptation (M&A). It may be desirable to focus only on mitigation given the limitations of budget, innumerable number of technologies and a large diversity of countries.
- 2. The project component identifies the link between low-carbon and climate-resilient development and transfer of climate mitigation technologies as one of the outputs. According to IPCC (2007), M&A linkage and opportunity for promoting synergy exists particularly for land-based sectors and activities such as in agriculture and forestry sectors. STAP suggests that the project explore the cost-effective synergies in agriculture and forest sectors to promote both M&A.
- 3. The PIF is silent on which countries in the region are targeted nor does it provide a robust framework/blueprint for prioritizing interventions at the regional or national level. A reference is provided to the ongoing TNA project, but no further information is available. PIF's statement to put highest priority on demonstration and deployment of "leap-frog" technologies in mitigation and focus on affordable technologies for vulnerable people for adaptation is not adequately justified. The PIF repeatedly refers to "Innovative Technologies" and "Leap-frog" technologies. How will these be identified, what criteria will be adopted, how will they vary from country to country based on the size of the country and level of economic development? STAP recommends developing criteria to identify the technologies based on mitigation potential, cost-effectiveness, barriers, etc.
- 4. A large number of energy efficient, renewable energy and adaptation technologies are considered. Obviously, there are hundreds of technological options. It is impossible to promote all these technologies. Thus there is need for prioritizing and ranking of technologies. Ranking of technologies could be based on

criteria consisting of indicators such mitigation potential, cost-effectiveness, barriers to large scale spread, etc.

- 5. Technology transfer is a complex and non-linear process that should support technological innovation at all stages of technology transfer chain using appropriate tools and methods. STAP recommends stressing support for the entire technology transfer chain targeted at particular countries and technologies. Robust analysis of specific regional and national barriers for selected countries in the region and clear set of policies/measures to respond to these barriers is requested before the CEO endorsement.
- 6. The project title emphasizes a regional approach to technology transfer, while the PIF itself is ambiguous on how the regional approach will be implemented. Regulatory harmonization across countries in the region can spur technology and market innovation at much larger scales than if implemented at the national level alone. Asia-Pacific countries are very diverse in terms of their enabling environments and baseline conditions for technology transfer. STAP recommends strengthening the regional approach in the PIF by prioritizing policies and measures that would be beneficial at the regional level vis-Ã -vis national levels. Specific policies that might be regionally beneficial are removal of regional trade barriers, subsidies for high-carbon technologies, reform of R&D regional institutions. Prioritization of regional vs. national barriers for technology transfer should take into account the entire technology chain as well as economic development of countries.
- 7. Proposed components 1 and 2 are hardly distinguishable in substance.
- 8. Given the low-income level of many countries in the Asia-Pacific region, STAP recommends strengthening knowledge networks for technology transfer in these countries by supporting investments in engineering companies, institutes and universities, improved business environment and focusing on adaptation technologies. As far as feasible this support should encourage South-South cooperation and technology transfer with emerging and developed economies in the region.
- 9. Among specific policy tools that proved successful for multilateral funding is the use of prizes and market commitments. STAP proposes to explore this specific tool in this project. Venture capital could play an important role in certain circumstances, particularly in emerging and developed economies of the region. STAP recommends exploring the potential for promoting venture capital investments in emerging economies of the region with possible technological spill-over effects to developing countries (North-South technology transfer).

STAP advisory response		Brief explanation of advisory response and action proposed
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:  (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.